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ACROSS THE WHITE EXPANSE
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Practical Facts about Stereophotography

CHARLES FRANCIS HAMILTON



STEREOPHOTOGRAPHY is one of the most pleasing forms of photography open to the amateur today. That is a statement of fact. In subsequent paragraphs we hope to give substantiating information which will cause the amateur, who has never experienced the delight of viewing a collection of stereographs, to hasten to the nearest dealer and purchase a stereo-camera. Stereophotography, as we may call it, is natural photography. It is two-eyed photography. The pictorialist must accent some part of a beautiful scene to obtain an artistic and striking result; but the stereograph retains every detail that made the scene attractive to us at first, and we can view it as long as we wish, without interruption.

An amateur, on a picture-tour, suddenly comes upon a view, the grandeur of which almost causes a gasp. He quickly sets his camera and makes an exposure. But, unless he is an artist, and is able to work up the print by some of the various processes, the result is usually uninteresting and disappointing. Too full of detail and too many confusing objects. Not so with the stereograph. The reproduction of the view will be wonderfully exact in the final print, except for the color, and we are even able to approximate nature's tints in the color-plate process.

Now, what makes all this difference? Simply the fact that the stereo-camera has two lenses, two "eyes", just as the amateur has two eyes. Likewise the two-eyed camera will view the scene in a manner similar to the way the photographer himself sees it. Depth, that element lacking in most ordinary prints, is present in the stereograph. We not only look at, but seem to actually see right into the picture, just as if we were at the very spot. The contours of the earth are plainly visible, the position of each object very distinct. The foreground, middle

and distant planes are well separated when we view the final print from the stereo-negative; and not apparently plastered against each other, as in the print from the single-lens camera.

Where this failure of the one-lens camera to render distance or atmospheric perspective properly is due to the extreme sharpness of the negative in all planes, that very quality is necessary to the success of a stereograph. The stereo-negative must be sharp. The sense of depth or distance is obtained by the dual vision of both the camera and the observer of the stereograph, not by out-of-focus parts of the picture which accentuate the subject and give the appearance of depth. In connection with this we may say that soft-focus lenses have no place in real stereophotography.

All the words we could write would not adequately describe the full advantage of a stereo-print over the print from a one-lens camera negative. After the reader has once seen a collection of stereo-positives, we will wager—a small wager, of course—that the "stereogerm" will begin to work and will never cease until Mr. Amateur owns a stereo-outfit of some kind. Further advantage, for those amateurs who do not wish to confine themselves to stereo-work alone, is that the amateur has the choice of two almost identical negatives, from which he may enlarge for exhibition or other purposes. Many workers and pictorialists of wide, even international reputation, use the stereo-camera for negative-making, and work up their exhibition-print from enlargements from these negatives.

But the greatest appeal is to the largest number, who wish prints or positives for their own and their friends' enjoyment, and the stereo produces these. For those who wish pictures in natural color, the Autochrome, Paget and Agfa color-plate processes are at their disposal, and we will state that a properly exposed and developed Autochrome-transpar-

ency, when viewed in the stereoscope, rivals in beauty, the original scene.

We have said much for the stereo-camera, let us now consider some alleged drawbacks. The only two we consider worth space are that one must view the positives in a stereoscope, and that the stereo-cameras are more expensive than the regular kind. We will dismiss the first statement with the assertion that it is no more difficult or awkward to view the stereograph in a stereoscope, than to hold an ordinary print or enlargement at ordinary reading-distance for viewing. Obviously, keeping the prints ready for viewing would make it impossible to keep them in albums, but a stereo-print studied in the stereoscope is much more satisfactory than the average album-print. Any especially attractive views can be enlarged to moderate size and placed in an album. As to the cost, when we consider that a stereo-camera is practically two cameras built together, and of best materials, it is obvious that the cost must be higher.

Stereo-cameras range in price from fifteen dollars to three hundred dollars or more, and in size from 45 x 107 mm to 5 x 7 inches, although there is one little instrument that uses standard motion-picture film. For as small an amount as thirty-five dollars one can obtain a really capable stereo-camera which uses film-packs or plates 45 x 107 mm in size, and is equipped with an F/5.4 lens and three-speed shutter. This amount is what one might pay for a postcard camera with F/7.7 lens and ball-bearing shutter. And the results from the stereo will be more pleasing in the end.

There are three sizes that may be considered standard, though manufacturers vary two of them greatly. The little 45 x 107 mm is made in that size only by every manufacturer we know, but the 6 x 13 cm size is varied to 7 x 13 cm also; and the so-called American standard size $3\frac{1}{8} \times 3\frac{1}{8}$ ($3\frac{1}{8} \times 6\frac{1}{4}$) is varied by different manufacturers in the following sizes: 9 x 14 cm, 10 x 15 cm, $8\frac{1}{2} \times 17$ cm, 9 x 18 cm, $4\frac{3}{4} \times 6\frac{1}{2}$ inches, 5 x 7 inches and 13 x 18 cm. But all these larger sizes are trimmed and spaced to approximate the standard American size as nearly as possible.

The lenses used on the little 45 x 107 mm size range from 55 to 75 mm focus according to the camera-construction. With such a short focal length of lens, it is obvious that great depth of field is obtainable, while using the lens at full aperture, which on most cameras is F/4.5. Naturally, this gives the possessor of this little instrument an advantage in speed-work and photography in shaded places. Also it is of advantage in portrait-work.

The middle size, 6 x 13 cm, uses lenses of 75 to 105 mm focus, usually the longer, and accordingly there is less depth of field, when used at large apertures. Many of these cameras are fitted with F/6.3 lenses, instead of the faster F/4.5, which gives an advantage of depth, with loss of speed. The larger sized cameras have lenses usually of 5-inch focus or perhaps more. To obtain good depth, it is always necessary to use smaller stops, and there is hardly any need of high-speed lenses except for portrait-work. F/6.3 on F/6.8 lenses are the usual equipment supplied with most large stereo-cameras.

For those workers who require a large print, the larger size may appeal, but for the average worker, the smaller pictures will be just as effective; because, when viewed through the stereoscope, they appear much larger, in fact we seem to be looking right into the scene itself, this being due to the magnification of the lenses and the stereo-vision.

As no American camera-maker builds either of the two smaller-sized instruments, it will be necessary for any one interested to obtain catalogs from American importers of foreign-made cameras in the 45 x 107 mm and 6 x 13 cm sizes. Such cameras are the Ica, Contessa-Nettel, Erneman, Goerz, Mentor, Voigtländer, Plaubel, Heidescope, Jules Richard, Gaumont and several others. The American importers who sell these cameras advertise in PHOTO-ERA MAGAZINE and will be glad to send any one all the literature and information they have at hand. For the standard American size, besides the foreign manufacturers, Eastman Kodak Company makes two excellent models, one Graflex. Catalogs are easily obtainable, and almost any dealer in Eastman supplies should have the models to show and sell.

As final word to any who may be skeptical as to the pleasure of stereophotography, we will state that we have never seen, nor heard of any amateur, who once taking up stereophotography, ever went back to the one-lens camera. On the other hand, the stereo-ranks are being augmented constantly by those who know the limitations of the ordinary camera. Although there are special lines in which the ordinary camera excels, the stereo holds front rank in pleasure in photography and enjoyment of the results by viewing in the stereoscope or taxiphote.

[For a number of months, many of our readers have urged us to have a stereo-department. In this issue we have established one and we earnestly hope that those who are responsible for the new department will support it and make it well worth having.—EDITOR.]

It is Good to be a Photographic Editor

SIGISMUND BLUMANN

Editor of Camera Craft Magazine

THE Associate Editor and Publisher of PHOTO-ERA MAGAZINE, the dear friend of the present writer, responded to my request for an article with something in the way of practical idealism that should be studied and applied by men and women in all lines of endeavor. If I, in my own capacity ever reach such heights of thought and action, may it be granted me to repeat 'till the habit is formed. Mr. Beardsley wrote as he felt and does as he feels.

When *Camera Craft* offered me the place I occupy and the connection was consummated, it was but the strengthening of old ties. For many years the general management and the successive Editors were familiars and friends. Also, I was not a stranger to the readers of the photographic press. Articles in both PHOTO-ERA MAGAZINE and *Camera Craft* had brought many kind letters and long-distance acquaintances had been formed, which now can be developed into real friendships. It is good to be an Editor, especially of a magazine of this class, because it offers the possibility of friends as well as mere readers.

Photography is a gentle art: Its votaries are apt to be temperamental, sympathetic, responsive. It is a creative art: pictures are made and elementary beauties combined into a unit quite as much as by the painter. It is a hobby that begets true fraternizing. As a vocation it ranks, or should rank as one of the liberal professions. These photographers, amateur and professional are mine own people. We have much in common and share it freely. My mornings at the desk begin a day of intercourse with friends and at the close, I do but leave them to go home for awhile and return to them on the morrow.

It is good to be an Editor: To be able to tell what I learn, to work with my fellows and pass on my experiences. To gather what may be gotten, to choose and publish what shall be useful, profitable, interesting, helpful, stimulating, and so along the list of appropriate adjectives.

The opportunity is at hand to search intensively for what is wanted and that is exhilarating. Our policy has been to specialize, rather, in specifics: We go in for constructive articles, rather than literary abstractions but we are not proof against being lured away, now and then, by the charm of literature. Personally, I have to be restrained by wiser judgment and my own resolution or this policy would be often outraged. The temptation to just talk with the reader is great but the reader is not to be beguiled thus. Having established a policy and gathered clientele on that policy, its maintenance becomes a matter of integrity, so that we try to give informative, constructive and comprehensive material. We cover the amateur, the advanced pictorialist, and the professional.

And there is joy in that. The variety makes the day pass quickly. The circle of acquaintances is larger and more varied. It is not a business, there is no work to it—this being an Editor. I find it all good, all fun.

My friendship for Mr. French and Mr. Beardsley dates back many years, when I was a contributor; but now as a collaborator, a cotemporary, the emotions not only hold but are intensified. They have worked for years as I am learning to work, toward the accomplishment of something real, something better and better in photography, and in photographic literature. There is no doubt in my mind that we share this spirit with all the Editors of the photographic publications. Certainly no periodicals can claim to do as much in a purely eleemosynary way or with higher ideals than the journals devoted to photography. Mark you, dear reader, there is a basic reason, deep down, and it is that we who help to make your magazines are photographers and enthusiasts. We have the same hopes, aspirations, emotions, quirks, and idiosyncrasies, as yourself. We are all "cranks" together, if you get my meaning. Thank goodness for the fact. It is what makes it so good to be an Editor—a photographic Editor.





FIGURE 10

BRUCE PHOTOGRAPHIC TELESCOPE, YERKES OBSERVATORY

The Camera in Star-Land

JAMES STOKLEY, M.A., F.R.A.S.

Part II

LIKE the sun—the moon, planets and stars all make an apparent passage across the sky every day because of the rotation of the earth from west to east. In order to photograph them, it is necessary to provide a means of moving the telescope. Such instruments are mounted “equatorially” which enables them to turn on an axis parallel to that of the earth. A clockwork is provided to turn it around this axis once every day from east to west, thus counteracting the earth’s motion. But clockworks are not absolutely accurate, and even if they were, there is a certain amount of refraction of light in the atmosphere, which causes an object near the horizon to appear a little higher

in the sky than it is actually. This requires that the telescope be guided while making a photograph, and it is done by an observer, so that photography does not dispense with the astronomer at the eyepiece.

With special photographic instruments, an auxiliary visual telescope is rigidly attached, and in the eyepiece is a pair of fine cross-hairs. These are set on a star in the field that is being photographed, and if it begins to move away from them, the instrument may immediately be adjusted. If the exposure is long—and four to five hours or more is common—the guiding is a tedious process, and to do it accurately calls for the highest type of observational skill.

Without a doubt, the best work of this kind

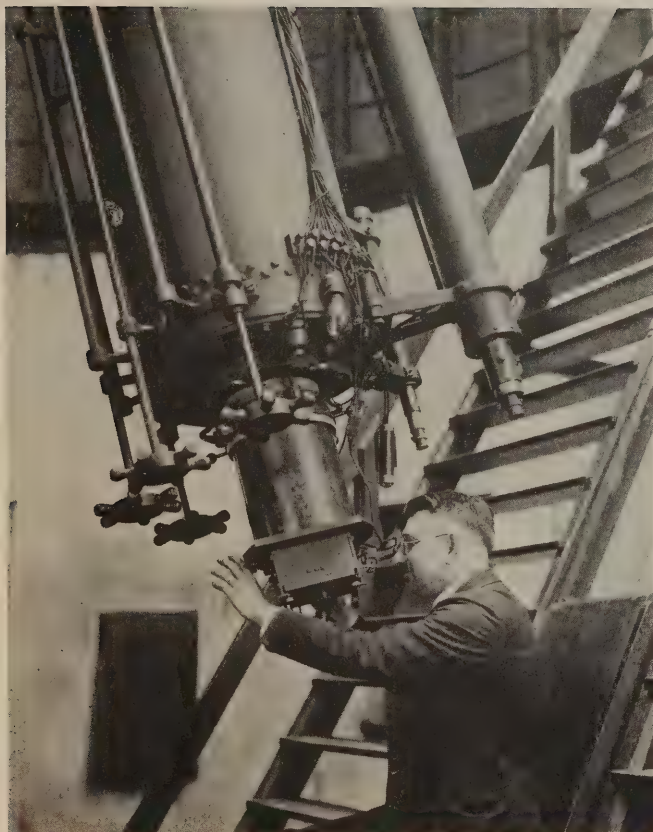


FIGURE 11
DOUBLE-SLIDE PLATEHOLDER, SPROUL OBSERVATORY

was done by the late Prof. Edward E. Barnard, of the Yerkes Observatory, who began as a photographer, became interested in astronomy and became the greatest of modern observers. Most of his work was with the Bruce photographic telescope, shown in Figure 10; but he made many fine photographs with other instruments. The Bruce telescope is equipped with four separate lenses for photography, so that the same region of the sky may be photographed simultaneously to different scales. There is, in addition, a visual lens which is used to guide the eyepiece which may be seen at the lower end of the instrument. The picture also shows the equatorial mounting and the clockwork inside the pier to drive it.

In visual telescopes adapted to photography, it is not always practicable to use an additional lens for guiding, and the double-slide plateholder is employed. This is shown in use in Figure 11 on the 24-inch telescope of the Sproul Observatory of Swarthmore College. A small right-

angle prism reflects an image of a star, just outside the field covered by the plate, into the eyepiece in which the observer is looking. This eyepiece is provided with the cross-hairs, and, as described above, the guiding star is kept on them. The adjustment is effected, not by moving the entire telescope, but the plateholder and the eyepiece with the two knobs of which the astronomer has hold. One moves it east or west, and the other north or south, so that the image of the object photographed may be kept on the same part of the plate.

An inconvenient feature of the usual type of equatorial mounting is that the eye-end of the telescope moves up and down through a distance equal to half the length of the instrument, and in the case of such a telescope as the large one at the Yerkes Observatory, this is over thirty feet. There, the difficulty is met by providing an elevating-floor. The entire floor forms an elevator which may be raised or lowered to suit the position of the eyepiece. This is



FIGURE 12

LOOMIS TELESCOPE, YALE UNIVERSITY

(INSERT) PLATEHOLDER IN OBSERVING-ROOM

used in several observatories, but is quite expensive. Another disadvantage of the usual mounting is that the temperature inside the dome must be the same as the outside air, otherwise the warm air rushes out through the opening in front of the telescope and the definition is hopelessly ruined. In the summer, this is not such an objection; but when the thermometer is around zero, and the astronomer must sit through the long winter-night at the eyepiece, it is not quite so pleasant!

Consequently there has been a tendency towards a telescope where the lens is fixed and the image formed inside a warm room, one or more mirrors reflecting any part of the heavens. The tower-telescopes at Mt. Wilson, already described, are of such a type, but they are used

exclusively on the sun. An instrument recently constructed at the observatory of Yale University is used for stellar observations. This is shown in Figure 12. The long diagonal tube is of sheet-steel and parallel to the earth's axis. At the bottom are the lenses, two in number, as one is used for guiding. In the small building, the roof of which slides off, is a large plane mirror moved by clockwork which reflects the light from the stars under investigation into the tube.

The image is formed in a small room at the top of the brick-tower, which may be heated and kept comfortable in even the coldest weather. Electric controls permit the mirror to be moved from the observing-room. The insert shows the plateholder and the guiding eyepiece beside it. As the mirror turns around as it follows the



FIGURE 13 (a)



FIGURE 13 (b)

NORTHERN PORTION OF MOON. COMPARE WITH FIGURE 2



FIGURE 14 PLANET SATURN PHOTOGRAPHED WITH 60-INCH REFLECTOR

object, the image rotates on the plate around the optical axis. To correct for this, an additional clockwork is provided in the observing-room which rotates the entire plateholder at the same rate.

The small motor seen above the plateholder operates a rotating sector, which reduces the light from a bright star so that its image on the plate will have the same intensity as another with which it is being compared. Although the effect could be obtained by simply covering part of the plate for, let us say, the first half of the exposure, it is desirable to have the exposure for all parts of the plate spread over the same interval of time. The method used employs an opaque disc, with an adjustable open sector. By varying the size of the opening, and rotating it in front of the image on the plate, the light may thus be reduced to the point of complete extinction. This arrangement is used at many observatories.

Next to the sun, the moon has probably been photographed oftener than any other celestial object, and it may be said that we have a more complete knowledge of the topography of the part of the lunar surface that faces us than we have of the earth. Although not so bright as the sun, the moon is sufficiently well illuminated to enable short exposures to be given. Even so, atmospheric conditions seldom permit absolutely

sharp pictures, and it is only by the making of a large number of plates that a good one may be obtained.

Two French astronomers, Loewy and Puiseux, at the Paris Observatory, made a series of excellent photographs which formed the basis of their elaborate lunar atlas. Later, Professor Ritchey made a series with the 40-inch Yerkes refractor which were probably superior. However, the finest that have ever been made are undoubtedly a few that were made on the night of September 15, 1919, when the new 100-inch reflector was turned on our satellite. One of these, a view of the northern portion, is shown in Figure 13, and if it is compared with Bond's photograph (Figure 2), an idea of the progress made in sixty years may be gained. Since these were made, the 100-inch telescope has been continually in use on more important problems, and it has not been possible to make a series of Lunar views.

Photography of the planets has not been so satisfactory as could be desired, and their observation still depends largely on drawings. They are all so small and so distant that high powers must be used, which, in addition to magnifying the planet, magnify the atmospheric disturbances with it. The planets also have a ruddy or yellowish color, which lengthens the exposure, during which any irregularity in the atmosphere

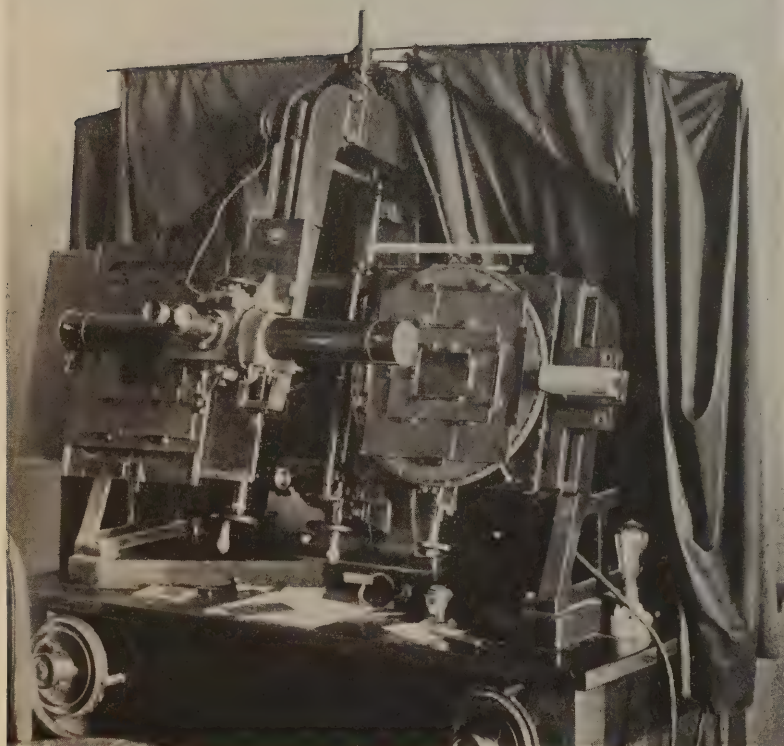


FIGURE 15

ZEISS STEREO-COMPARATOR, YERKES OBSERVATORY

has a deleterious effect on the definition. Some of the best planetary photographs have been made at the Lowell Observatory at Flagstaff, Arizona, by the late Prof. Percival Lowell and Dr. E. C. Slipher. This observatory has probably the best atmospheric conditions in the world and they have specialised in planetary observations. They have made photographs of Mars which, although not so clear as could be wished, confirm their visual observations of the markings on the planet called "canals", although they are probably not of artificial origin. Possibly, photographs made during the close approach of Mars this year will reveal more of these markings, and show that they are not, as has been suggested, optical illusions.

The planet Saturn, although farther from us than Mars, is much larger, and does not show such a red color and very fine markings. Good photographs of it have been obtained, the best being that by Professor Barnard with the 60-inch reflector at Mt. Wilson, made in 1909, and shown

in Figure 14. The rings, which make the planet of great interest, and which consist of a great swarm of tiny satellites revolving in adjacent orbits, are well shown, and also the dark marking, known as Cassini's division.

In addition to the eight large planets of the solar system, there are a great many small ones, called asteroids, which revolve in orbits between that of Mars and of Jupiter. By some they are believed to be the remains of a larger planet that once occupied that position, and then exploded into small fragments. They vary from about a hundred miles in diameter down to ones that can barely be detected, and photography has played a large part in their discovery. They are so small and relatively unimportant, that their large number makes them now rather a nuisance to keep track of; but they are of some interest. The method used for their discovery depends on the fact that, as planets, they move with respect to the stars. Thus, if a photograph is made of a part of the sky where there is an



FIGURE 16 HALLEY'S COMET, LOWELL OBSERVATORY

asteroid, and the telescope kept pointed at the stars, the asteroid will be recorded as a short line. Usually a lens of short focus, covering a large angle, is used, and sometimes two are mounted side by side which make two photographs at once. Then, there is no danger of mistaking a defect in the plate for a new asteroid.

Using this method, Prof. Max Wolf, at the Heidelberg Observatory, in Germany, has been a prolific discoverer of these little planets. In the United States, a number have been discovered by an amateur astronomer, the Rev. Joel Metcalf, a Unitarian minister at Winchester, Mass., who used a modification of Wolf's method. As the asteroids move in approximately the same direction and with the same speed, he guides his telescope to follow one if it were in the field.

Then, after a long exposure, the plate is developed, and the stars are shown as lines, and an asteroid, if present, is represented by a dot. This has the advantage that the light from the planet, always faint, is kept on the same part of the plate during the exposure and a better image is obtained.

Another device that has been used to study these small bodies, and also for numerous other subjects where motion may be observed from one time to another, is the stereocomparator. One of these instruments, made by Carl Zeiss, and now at the Yerkes Observatory, is shown in Figure 15. In the case of an asteroid, two plates may be made on two successive nights showing the same background of stars, but with the object sought in a different place on each. With possibly thousands of stars visible, it would be

difficult to determine which object moved; but the stereocomparator quickly reveals it. The two plates are placed in the instrument and a system of totally reflecting prisms enables either one to be seen in the same eyepiece, an oscillating shutter giving a view of one after the other in rapid succession. If the plates are adjusted so that the star-images occupy the same position as seen in the eyepiece, they will not be affected when the shutter is operated; but if the image of an asteroid is present, it will appear to jump to and fro. The effect is quite striking and the object that has moved may be instantly detected. The device has also been used to determine the motion of the stars by comparing plates made with the same telescope many years apart.

The comets which appear from time to time,

also come into the solar system, and some may be regarded as members of it. They are photographed with wide-angle lenses, such as those on the Bruce telescope, and indeed, this instrument, in the hands of Professor Barnard, produced many fine cometary photographs. Like the asteroids, a comet moves among the stars, and the instrument must be pointed at it during the exposure, thus recording the stars as short lines. Figure 16 shows Halley's comet, the last bright one to appear, on its visit in 1910, while it was near the planet Venus. This was made at the Lowell Observatory with a telescope similar in construction to the Bruce, and, on account of the brilliancy of the comet, an exposure was given short enough to record the stars as dots.

(To be concluded in February issue.)

Practical Kinematography

HERBERT C. MCKAY

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Chapter Two—The Kinematographic Camera



THE choice of a kinematographic camera is determined by but two factors. First, by the type of work which it is proposed to do and, second, by the amount of money which can be devoted to such purchase. With this, as with most cameras, more money will purchase a better instrument; but as is also true in other walks of life, the price asked is not a sure index of the quality of a camera. So, it follows that the best thing to do is to purchase the most expensive camera possible when you have learned to determine if the price asked is in proportion to the quality received.

I fully believe that the cameras I shall describe here are well worth every cent asked, and some of them represent remarkably good values. A careful study of the specifications of each will show the particular advantages which make each camera desirable for a certain class of work. Thus the Ertel is very moderate in price for the quality of the camera, the Sept is automatic, the Ica is easily portable. These cameras I have described in "Kinematography for the Amateur". Among the cameras described in this chapter, the Bell & Howell, one of the most expensive standardised cameras ever produced, is worth every cent it costs because film can be run through it for a dozen or more exposures and still have exact registration as long as the physical body of the film remains unaltered. The Pathé, a moderate-priced camera, is recognised all over the world as a strictly high-grade

professional camera, the Williamson is a sturdy knock-about model, and so forth.

There are certain standards to which all cameras should conform, if they are to be used for commercial production. The lack of any of these points means trouble, and perhaps the loss of sale for certain films. Purchase a camera which will turn out the work you desire.

The body of the camera should provide adequate protection for the mechanism. Personally, I prefer teak or metal as such bodies are not severely affected by adverse climatic conditions, and metal construction lessens liability of static. Leather-covered bodies look well, but must be cared for with more attention than other finishes as the leather scratches easily and rubs. However, this is a matter of personal preference.

A turret-front is a convenience; but not absolutely necessary. Some method of lens-mount should be obtained which will allow quick and easy change of lenses with accurate registration of focusing-scale so that any lens may be used in the camera without having to have recourse to the visual focusing-screen.

Do not try to do anything beyond straight news or scenic work with a camera which is not equipped with a visual focusing-device. Focusing-scales are convenient, but whenever possible focus the lens by the aid of the focusing-screen. It is more satisfactory. In double exposure and all laboratory exposure such a method of focusing is essential.

The limitations of the fixed shutter are as

great in kinematography as in still-photography, always supposing the available technical knowledge is the same in both cases. Although not used as often as in still-work, the adjustable shutter should by all means be used on the camera intended for serious work.

The necessity for an automatic fade is questionable. In some lines of work it would be rarely used, in others it is indispensable. I should advise its purchase whenever possible, but as a camera so equipped will cost at least four hundred dollars, some workers may prefer to omit it and use the hand-fade or outside iris instead.

The type of take-up is immaterial. The better studio-cameras have the visible spring-belt type as is logical with outside magazines, but a good clutch works just as well and is automatic in reversal. If the take-up is positive and gives proper tension, it is all right.

Some very good and very expensive cameras use the claw or rod and crank intermittent, and I have seen excellent work produced by Geneva intermittents; but as commercial work presupposes more or less multiple-exposure work, I cannot but believe that the harmonic cam is the only truly professional type of intermittent. I know that I shall be harshly criticised for this statement, but still I give it as a personal preference, the wisdom of which is upheld by the fact that nearly every camera of professional pretensions uses this intermittent.

The magazines of the general purpose camera should have a capacity of at least two hundred feet and be perfectly light tight. There are few other requirements for this part of the mechanisms. Some cameras are equipped with release-throats in the magazines. By the use of these, the throat is opened wide by closing the camera door or by manual latches which lock the door when opening the magazines. This relieves the film of all friction at the throats; but the velvet-lined throats are satisfactory if care is taken to keep all dust or other foreign substance off of the velvet and to brush up the nap when it becomes matted in order that a perfect light-trap may be formed. Dust or grit on the velvet will scratch and streak the film. If you have a camera with velvet-throated magazines, you must keep the velvet clean and fresh. Replace them at the first signs of wear.

As for lenses, it is difficult to say which is best. The focal lengths in common use are 25 mm., 30 mm., 32 mm., 35 mm., 40 mm., 50 mm. (2 inch), 75 mm. (3 inch), 4 inch and 6 inch. Lenses of 10, 12 and 16 inches focal length have been used; but these extreme focal lengths will prove satisfactory only in the hands of an experienced telekinematographer, if I am permitted to use

such a word. Even in the hands of an expert the most favorable atmospheric conditions and aesculin filters are necessary for the best results.

The greatest aperture I have ever heard of was a lens which worked at F/0.5 or nearly sixteen times as fast as the ultraspeed F/1.9, which is the highest speed-lens which has proved satisfactory in commercial work, and the difficulties of working this lens are so great that it is seldom used. Only a combination of a scene which must be photographed and very dull light will tempt the kinematographer to use this lens. The next degree is the F/2.9 which is rapidly growing in favor and promises in the near future to usurp the position of the F/3.5 as the standard effective aperture for kiné-lenses. The longer focal lengths, four and six inches, are usually combined with a maximum aperture of F/4.5 although they may be obtained in F/3.5. Some amateur cameras are equipped with lenses which work at maximum apertures of F/6.3, F/7.7 and even F/8. These lenses are too slow for the commercial kinematographer, not because he will often use the extreme aperture but because he realizes that the reserve speed is most desirable.

In addition to these anastigmats, there are the so-called soft-focus lenses, which are not fully corrected and give a soft, diffused definition and which give the sharpest definition at the center of the field and grow more diffused at the edges. So the kinematographer may have nine lenses which work at F/3.5, one working at F/1.9 and one soft-focus, or eleven lenses. This is most evidently impractical, for the weight and bulk would be considerable and most of them would never be used. The following assortment is good enough to cover any class of work usually encountered and will be a larger assortment than most professionals use.

| | |
|--------|-------------------------|
| F/1.9 | 2-inch |
| *F/3.5 | 35-millimeter (1½ inch) |
| *F/3.5 | 2-inch |
| *F/3.5 | 3-inch |
| †F/3.5 | 4-inch |
| †F/3.5 | 6-inch |
| F/4.5 | 2-inch soft focus |

Lenses marked (*) may be had in the F/2.9. Those marked (†) may have the F/4.5 substituted without real loss in efficiency. However, this still leaves seven lenses which, entirely aside from the financial investment represented, mean bulk and weight, if carried with the outfit. In time you may acquire such an assortment; but it should be the result of piecemeal buying over a period of time. In order that the proper initial assortment may be obtained let us consider the usefulness of each lens, then you may select those which are of value to you in the



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particular branch of cinematography in which you expect to do the most work.

The logical starting point is the two-inch lens, which may have an aperture of either F/2.9 or F/3.5, the latter being, probably, the most widely used kiné-lens in the world. This lens is the normal lens for cinematography, those of shorter focus being termed wide-angle lenses and those of longer focus being known as long-focus or telephoto, depending upon the focal length. The two-inch or fifty-millimeter lens embraces an angle of 28° on standard film, which is considerably less than is the usual practice on still-work. The pictorial worker who uses a $3\frac{1}{4} \times 4\frac{1}{4}$ will use lenses as short as six-inch focus with such a size and the hand-camera in that size uses lenses with as short focus as five inches or even less; yet, the five-inch lens cuts a 46° angle and the six inch a 39° angle on such plates. Many press-cameras have lenses which embrace an angle of 80° or more, and a three-inch wide-angle lens will embrace an angle of 121° on a 5×7 plate. We may safely say that a normal lens will give us about 60° . So we see that the normal kiné-lens is equivalent, in so far as the angle is concerned, to a ten-inch lens on a $3\frac{1}{4} \times 4\frac{1}{4}$ plate.

The two-inch lens is used for most studio and news-work, both for average distances and close-ups. It is a lens which will give satisfaction in most work where figures are included and should, by all means, be the lens to be obtained first.

The three-inch lens embraces an angle of 20° , and gives an image of 50% greater lineal dimensions than the two inch. It is useful in news-work when it is impossible to get close to the subject, and is used in studios to make semi-close-ups without moving the camera from the position occupied in making full-shots with the two-inch lens. It may be the first lens, if you anticipate working under conditions where you cannot always choose your position. In studio-work it may supplement but never supplant the two-inch lens.

The four-inch lens should follow the two-inch lens, as it gives a marked enlargement, namely a linear enlargement of 100%. It is used in the same manner as the three-inch and is more valuable to the owner of a two-inch lens as the difference between the two- and three-inch lenses is not enough to justify both until such time as you wish to complete your assortment. This lens is also very good in scenic work, and in such work is probably the most valuable lens you will own. The shorter focus lenses give an image of distant components of the landscape which is so small that much of the beauty is lost. It also aids pictorial composition in that

it allows fewer objects to be included and makes for simple composition.

The six-inch lens is a telephoto-lens when used in cinematography. With it you will begin to encounter the troubles of fog, haze and the usual atmospheric obstructions which the tele-photographer encounters in still-telephotography. It should rival the three-inch lens in the race for last place.

If you expect to do topical work in interior situations, such as factories, offices and other places where operating-range is difficult to find, the use of the 35-millimeter lens will enable you to work much nearer the subject. As this lens works at an angle of about 42° , it will be seen that the angle is not so great as to produce serious distortion. This lens may also be used in making panoramas of groups to conserve film; but as the images so produced are so small, such procedure is questionable economy. It may be used in any situation where a broad field is desired.

The soft-focus lens has a place in the kit of all professionals as the close-up is rendered much more artistic by its use. It does not give the "fuzzy-wuzzy" effect of extreme diffusion, but a portrait-quality which is more desirable than wiry sharpness in an enormous screen-image such as most close-ups show us. If you do not desire to use such a lens, you may obtain a very good effect by using the Eastman diffusing-discs. The disc sold for use on hand-camera lenses is very good for this purpose.

The F/1.9 lens is one to be used only when the illumination is very poor. It is an axiom in photography that a large aperture lens will do anything a small aperture lens will do when stopped to the same aperture; but it is untrue in this case. The quality of these ultra-rapid lenses is rapidly increasing; but, at present, they are subject to inferior correction. There are traces of astigmatism left and very rarely do the chemical and visual foci of such lenses coincide, thus making necessary the use of a focusing-filter. Also, this difference is not constant but changes with different individual lenses. So this lens used at F/3.5 will not give the fine anastigmatic quality of the standard two-inch F/3.5 lens.

Thus if I were beginning to make news-films, I should purchase a two-inch, four-inch and an F/1.9. For scenic work I should purchase the three-inch, four-inch and F/1.9. If I were going to travel and try to obtain rare foreign views, I should take a two-inch, four-inch, six-inch and F/1.9,—the six-inch lens for stealing views which could not be obtained otherwise. In fact, on such a journey I should be tempted to try out an eight- or ten-inch lens. For studio-



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GANG-HITCH
TANDEM-HITCH
J. D. HUNTING

work I should begin with a two-inch, a four-inch and a soft-focus lens. Studios usually have sufficient illumination so that there would be little need for the F/1.9.

The tripod should be rock steady. This means a certain amount of weight. Within reasonable limits the studio-tripod cannot be too heavy; but for topical work a lighter model may be used. Many cameras are supplied with tripods

which are too light and should be replaced with a better model. The Universal tripod is the lightest I have ever used which gave satisfaction. However, if the rack-work operates smoothly and the support furnished is rigid, the tripod will serve its purpose. A good tripod is vitally important to good kinematography, especially for the professional.

(To be continued)

The Difficulties of Photographing Chinese Life

RAY H. SKELTON



IRTUALLY all of the many difficulties encountered in making pictures of Chinese life arise from the ignorance, curiosity, and superstition of the native. Hostility on the part of inhabitants of the interior is not difficult to understand when one considers their explanation of the process of developing; for they believe that foreigners wash the prints in a solution made from the eyes of kidnapped children. In a way, this theory is perhaps more logical than that prevalent in the treaty-ports, where the Chinese have come into contact with conveniences of western civilization. These sophisticated folks of the city understand that pictures are both made and developed by electricity, a magical something that accomplishes everything and anything beyond their simple comprehension.

Leading out of Tientsin is a narrow street lined on both sides with busy shops and frightfully crowded with traffic. The congestion on the fifteen-foot roadway at last became so intense that even the patient Chinese could no longer endure, and it was widened to thirty feet by condemning a strip down each side and compelling property-owners to rebuild to the new lines. Construction was carried out in typical Chinese fashion, without regard to the safety and convenience of passersby. Store-fronts on both sides were torn down simultaneously and the debris hurled into the street promiscuously. During this stage of operations, the air was filled with falling bricks, and pedestrians had to look out for themselves. Naturally, I wanted a picture of the old street as I had come to know it through hours of waiting. Investigation soon showed that I could get nothing from the roadway, so I climbed a telephone-pole. A crowd gathered to see the fool foreigner making a monkey of himself, and a traffic officer displayed

great concern regarding my safety. When I took out my Kodak and prepared for action, the conversation shifted from my eccentricity to photography and the marvels of electricity.

Although country and city people are divided in their opinions on the processes of photography, they agree with regard to its effect upon the subject. At the request of a missionary, I made a picture of a girls' class at a station on the outskirts of Tientsin. At the time nothing unusual occurred, and I assumed that contact with foreigners had made the children familiar with our ways. A day or two later, however, one of the thirty odd pupils was slightly indisposed. The superstitious mother at once attributed the illness to the making of the picture, and forthwith she and a few kind neighbors carried the clothing of the sick child to the mission-yard where the group had been photographed. There they waved the garments in the air in the hope of enticing the spirit of the sick child to return to them; for the Chinese firmly believe that when a person is photographed a portion or perhaps all of his spirit is taken from him and imprinted upon the negative. They may disagree about the underlying processes of developing; but this theory of exposure is accepted by all. Hence, it was but natural that these women should beat the air with the idea of recapturing some of the child's spirit which might have managed to escape the lens of the camera.

All Chinese are superstitious in some degree, but the professional mourners are the worst I ever encountered. It was this characteristic that for three years successfully baffled all my attempts to get a picture of a beautiful miniature temple carried in funeral processions. This temple belonged to an undertaker in Tientsin and was the most elaborate I had ever seen. Whenever I attempted to photograph it, some



THE RUINED ABBEY

WARREN R. LAITY

HONORABLE MENTION—ARCHITECTURAL SUBJECTS

coolie would invariably dash out from the line and put his hand in front of the lens. All I have to show for my repeated efforts is several blurred negatives.

Street-barbers are nearly as difficult to get as mourners. I have even known them to abandon their customers to the mercy of the camera. Blacksmiths likewise have no more regard for the horses they are shoeing. In Peking I used all the strategy known to the camera-fan, focused on an object in the opposite direction, approximately the same distance away, and turned suddenly to snap the group; but the wife of the smith had warned him, and all that was left was the poor horse, so trussed up that he could not escape.

Women are especially difficult to photograph. Confined to their homes more than their American sisters are, they have come into contact with foreigners to a limited extent; and are, therefore, even more superstitious than the men. This quality, combined with their natural shyness and timidity, makes it very difficult to

photograph them. On the other hand, their bound feet are a serious handicap in effecting an escape, and I have caught many who would have gotten away if able to hurry.

Children alone have just enough curiosity to risk a portion of their spirit. I have gone into villages where the youngsters have never seen a white man, and after their interest had changed to friendship, I have had but little trouble to gain their co-operation. But children the world over are alike in failing to realize that the best picture is one which shows them at their play. A Chinese child will stand at attention, sit in or pull a ricksha, or strike any unnatural pose that may suggest itself; but I never had much success in catching them at their games, for their play was entirely forgotten while a camera was in the neighborhood.

Perhaps the most interesting experience my Kodak has afforded me came when I gave two village children a print of a picture I had made of them. It occurred in the center square of a fair-sized village in front of an old temple, now

used as a police-station. I waited an hour or so while the streets were scoured for the children that I was seeking. Meanwhile, a crowd gathered until there was hardly breathing space. At last, the boy came for his print; and when I handed it over to him, he glanced at it for a tenth of a second and then did the mile in nothing flat. The little girl who had been his partner in the photograph acted very differently. The picture seemingly ruined her childish life, for she broke down into sobbing and wailing. I have seen coolies dying by the roadside; beggars with horrid, running sores; refugees from flood and famine; but nothing more pathetic than that poor, little girl. Her sin had found her out.

The greatest thrill came at Pei-tsang, during the Chinese New Year. Some itinerant performers were giving a show, which one of our foreign women wanted to see. It was a village which we knew quite well; but we had not thought that our company would afford a counter attraction which would put an end to the show. In less time than it takes to tell it, we were the center of attraction and found ourselves in the midst of a crowd comparable to that watching the returns of a World Series. Finally, gaining a footing on a pile of rubbish off to one side of the village-square, we got an opportunity to catch our breath before going down into the mob to battle our way out of the village. From that elevation I raised my camera above my head and took aim at the holiday-crowd. They were in high spirits and little cared what happened. Their jovial happy faces show why we enjoyed our visit with them, and why we long to return again.

The difficulties so far enumerated are the ones which make photography a real sport, but they are by no means all that are encountered. The dull days of winter, when the sky, water, earth, and the faces of the people are all the same yellow color, is no time for picture-making; and there are so many interesting scenes peculiar to this time of the year—the ice-bridges, the pietzas (ice-boats) on the rivers, and the fishermen on the ice, that even the old-timers spoil several films to get one good negative.

In China, the camera-fan must look ahead and

anticipate his campaigns; for even in the treaty-ports, such as Tientsin, Shanghai, and Peking, it is sometimes impossible to get films. In the interior, it is out of the question.

The excessive humidity and heat of summer make it necessary to seal the unexposed films in a leaden tube, and require that they be *used* and *developed* within twenty-four hours from the time they are placed in the camera. This means that the amateur must do his own developing, for outside of the treaty-ports this service is not available. Another incentive for developing your own pictures is the unreliable work of professionals. I had a number of good films ruined by holes in the gelatin-coating. When traveling, I managed to do my own developing by using ice-water and electric fans; and the only two films I lost became too warm while drying in a current of air.

Once, in Soochow, I was unwrapping my last roll of twelve exposures preparatory to photographing some women who were washing clothes in one of the canals. As I broke the lead-case, the film slipped from my hand and fell into six inches of water. There were some rare pictures of Chinese life in that vicinity and not another film within two hundred miles. For that reason I risked using a film that was apparently saturated. Much to my amazement and delight, the wet film functioned perfectly; and some of the pictures recorded upon it are among my best.

Photography is rather an expensive hobby in the Far East; for all supplies are very costly. Cameras and equipment of all sorts are available, but at prices about double those in the United States. In 1918 to 1920 an amateur printing-machine cost about fifteen dollars gold, and hence I built my own for about four dollars and used it to good advantage. Paper was particularly expensive and would not keep through the summer-months.

Despite these disadvantages, I never enjoyed my camera more than during my three years' visit in China; for there can be no pastime more fascinating than stalking some street-scene which you are eager to add to your collection and which is really difficult to obtain.



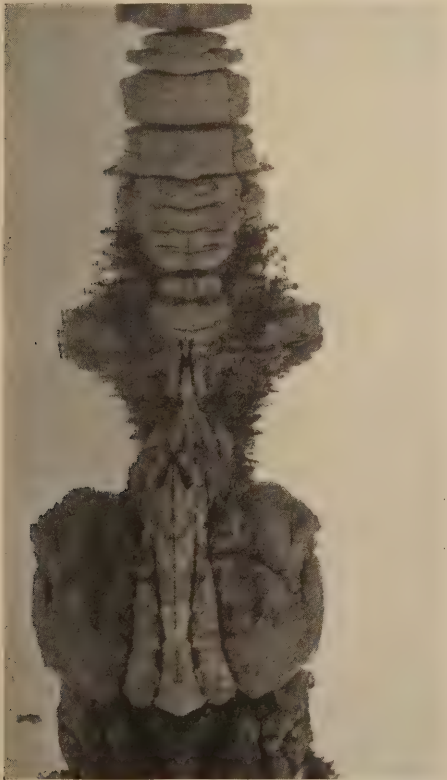
Totem-Pole Rocks

CHARLOTTE B. DUNLAP



SWISS seeing Sylvan Lake for the first time, might easily mistake it for his own Lake Lucerne, and he might as easily mistake the Black Hills, at whose heart it lies, for a portion of his native land. So clear are the mirror-pictures on its glassy surface, that these reflections together with the turquoise blue sky and timbered mountains explain the phrase, "The Switzerland of America", which attracts the traveler's eye, as he nears its shore.

The Black Hills of South Dakota, so called from the Indian Paha (hills) Sapa (black), where the most imposing scenery east of the Great Rockies is known to exist, might more deservedly bear the name of "Purple Mountains". The pines, blue spruce and gray granite, combine to form a purple tint, as picturesque as one might expect to find in the Swiss Alps or in the Jura Range. This rock-walled lake, which is situated in the Custer State Park, has an altitude of sixty-two hundred feet above sea level.



SYLVAN LAKE

CHARLOTTE B. DUNLAP

The visionary totem-pole is a vivid picture of the imagination and, like the original totem-pole of the Indians, in it the half-human, half-animal figures seem to be represented. The totem-pole is so called—according to the *Encyclopedia Americana*—from totem, an Indian word meaning my family-token, and appears to have been applied originally to some bird or beast held sacred by certain American Indians as the sign



TOTEM-POLE ROCK, SYLVAN LAKE

CHARLOTTE B. DUNLAP

or symbol of the tribe or of an Individual Indian. The totem-pole is a pole used among North American Indians to exploit the totem-figures which are seated above one another and holding erect a pole, on the summit of which is the totem. This pole or pillar is carved and painted with a series of totemic symbols, and is set up before the houses of certain Indian tribes of the northwest coast of North America.

It would seem that a magical hand had placed the rocks in a weird arrangement on the rim of

this basin, when the similarity of these rocks to a geological totem-pole is recognised. On entering Custer State Park from the east, the climb from Rapid City—which is one of the gate-ways to the Black Hills—to Sylvan Lake is an arduous ascent of nearly three thousand feet in less than sixty miles. The traveler, after the last lap of the slow and hazardous climb, is rewarded by a view of Harney Peak, the greatest peak of the Black Hills, and by the fact that just around the corner is the unique lake.

It was near the sun-set hour of a mid-summer's day, when the party, of which the writer was a member, completed the drive past the Cathedral Spires, beautiful as those of Westminster, and through the Needle's Eye, to the fragrant grove of cedar and spruce, which fringes the shore of this calm and peaceful lake. This scenic gem of beauty is an artificial lake enclosed by mountain-walls of granite and locked in by human hands. It nestles like a fairy-land at the base of the majestic Harney Peak, being held up in the mountains by a large government dam, and is fed by rains and melting snows.

The mirrored reflections of the rocks, which

encompass the lake—this reflection is perfect at the twilight hour—together with the picture of the rocks, bear a striking resemblance to a totem-pole, as may be observed in the accompanying illustrations, if viewed vertically. The placid water of this wonder-lake, if photographed with lights just right for the perfect reflections, forms a picture which shows clearly why the name Totem Pole has been so fittingly applied to the rough, unyielding wall.

As one studies the grotesque figures of the imaginary totem-pole, all sorts of fantastic shapes appear, and it seems as if elfin-hosts had piled the rocks enchantingly for the amusement and conjecture of the traveler. In such environment, one is reminded of the lines of Arthur Chapman:

"Out among the big things—
The mountains and the plains—
An hour ain't important,
Nor are the hour's gains:
The feller in the city
Is hurried night and day,
But out among the big things
He learns the calmer way."

How We Improved Our Pictures

BESSIE O. JOHNSON



VERY time my friend and I went fishing, hunting or on a hike, we fervently wished that we owned a camera. There were so many beautiful scenes and pleasurable events which we wanted in pictures to be kept as reminders of happy days. But we did not want to buy a "cheap" camera and we had not the money to buy a good one. As the Gold Dust Twins said, "That was where the rub came in." My friend's suggestion that we purchase a camera on the installment plan met with my opposition until it suddenly occurred to me that we could make the kodak pay for itself and more, and thus bring us profit as well as pleasure.

So we went to a friend of ours who owned an interest in a drug-store and we described to him as nearly as possible the kind of camera we wanted and the price we desired to pay. Our friend particularly recommended the No. 2c Autographic Jr., and as it seemed to be suited admirably to our purpose, that was the camera we selected. The dealer, as most of our experience had been with box-cameras, had to explain

to some extent the workings of our camera. "But," he said at length, "there are no set rules that I can give you which will enable you to make good pictures. You will have to learn by experience. Your first pictures may not be successes, but study your instruction-book and you will learn." So, armed with this meager knowledge, my friend and I set forth to make our fortune, à la camera.

Our first pictures were better than we expected, as they were not total failures; but they were lacking in many respects. Our time-exposures were dim and blurred and there was not a picture among the collection that had any value or appeal either from the standpoint of originality, beauty, or human interest. Almost every picture was unbalanced, and the backgrounds and foregrounds were not properly handled. For instance, some pictures had a broad, unbroken expanse of foreground with the subject, or subjects, an almost unrecognizable object in the distance. Friend partner and I really did not know what constituted an artistic picture and we were taking no great pains to learn.



REFLECTIONS

BESSIE O. JOHNSON

I told my friend that we should "look before we took", but he—pardon my laying the blame on him—he admits his guilt, however—would grow impatient and insist that we photograph anything that attracted our attention. But we did not waste many films in that way. Upon my insisting, we began to study *Kodakery* and other photographic magazines and to watch our step. Immediately, the quality of our work began to improve. Fortunately, we have had a photographer-friend who is interested and his suggestions have been invaluable.

We bought our camera last November, 1923, and it has become our most highly-prized possession. In February, we had our first opportunity to make snow-pictures. As we had eagerly looked forward to such an occasion, we were out photographing by 8:00 o'clock the morning that the sun came out. We exercised great care in making each snapshot and our pictures were successful beyond our wildest dreams, two

views being pronounced prize-winners by our photographer-friend. One of these I consider almost as good as "Winter Reflections," shown in the December, 1923, PHOTO-ERA MAGAZINE.

All the snow-pictures made by my partner were exceptionally good, and in justice to him. I want to state here that he is a much better photographer than I am. There is a sharpness of outline and clearness of detail in his work that is often lacking in mine.

In concluding this article, which I sincerely hope will be of some benefit to other amateurs, I want to advise those who have not a camera to get one. It will repay you a thousandfold in pleasure, even though you never sell a picture. The woods and streams are alluring, there are baby-smiles you want to remember—even old "Rags" seems to be begging you to make his picture. In years to come, your kodak-album will be your most cherished possession and you will rejoice that you bought a camera.



THE BROOK

BESSIE O. JOHNSON



MISSION SAN JOSÉ

RUEL MCDANIEL

My First Graflex Pack

RUEL MCDANIEL



IN the height of enthusiasm, a friend had told me that a person could make a Graflex do almost anything except talk. Not knowing anything about cameras in general or Graflexes in particular, I naturally concluded that I ought to be able to go my friend one better by making a Graflex talk a little, at least. So, assuring the family that the camera would surely pay for itself within a few weeks in both pleasure and cash, I went to a dealer and came away with a new 4 x 5 Graflex equipped with film-pack adapter and filled and keyed up for twelve "shots". This was Saturday afternoon, rather late.

I had no flashlight-equipment, therefore we had to defer the thrill of exposing our first Graflex pack until the following day. We were in a city that lends itself well to the whims and fancies of the amateur photographer; a city that shows you a mixture of old Latin atmosphere and landmarks and the footprints of modern Anglo-Saxonism that you seldom see in any other place. We were in quaint San Antonio, Texas—the city of missions, Mexicans, sunshine, cowboys, business and photographic opportunity.

Sunday's weather seemingly was made especially for us and our new Graflex. Not a spot of cloud marred the sky, and a Spring sun shone down intensely. We climbed into the automobile and finally "shoved off" at two o'clock, heading for the postoffice to make a correct start around the Mission loop.

"Look, there's the Alamo! Let's make a picture of it first!" exclaimed Carol as we came in sight of the postoffice and the old Alamo mission simultaneously, speaking as though she had never seen it before, although we had been in San Antonio a week and had passed the Alamo every time we went downtown.

"Why not show our individuality about it?" suggested George. "Everybody else photographs the Alamo, first thing; so let's save it until the last," and the suggestion was adopted after a heated debate, the proposition carrying the house by a vote of two to one.

We set the speedometer at zero, with the postoffice as the starting-point, according to the motor-log for the Mission-loop trip. We passed along Alamo Plaza, with the Alamo to the left, across West Commerce Street and out South Alamo.

The first object that came into view which we considered distinctive enough to grace the surface of any of our first twelve film-packs was Mission Concepcion, begun in 1702 and completed twenty-nine years later. The speedometer registered 2.6 when we pulled up in front of Concepcion and switched off the motor. Convincing the family that I was the "veteran" of the household so far as making pictures was concerned (Carol and George had never seen a Graflex before, whereas I, the oldtimer, had priced several in various cities during the past five

texture. It was some twenty-five years in the making. Naturally, we must include this window in our picture of San Jose.

As there were other automobiles in the foreground to provide the touch of life that our photographic instruction-book had told us to have in each landscape and exterior picture, it was not necessary to move our own into view, it still being somewhat camera-shy. As the first pack of films was the basis of experience more than for practical usage, I decided to slow this view down to 1/50 second with the same open-



FIELD BUILDING, MISSION BURIAL PARK

RUEL MCDANIEL

years, casually examining each), I made the pictures, while the others and the automobile provided the animation for the scenes.

I stepped off about fifty yards, focused to include a part of the automobile as well as the mission in the picture, set the diaphragm at F/11 and adjusted the curtain-aperture and the tension to give an exposure 1/75 of a second.

As the speedometer registered 4.7, we had Mission San José on our left. This old edifice, the guide-book assured us, was erected in twenty-seven years, after being begun in 1701. The book further called our attention to the fact that this mission boasted of having one of the finest carved windows known to American archi-

ing as before, F/11. I waited until a crowd gathered about the historic window to listen to the lecturer from a sight-seeing car which includes the missions in its itinerary, and then snapped. I was delighted with the animation and the general plan of the picture and told the family so.

We were just turning the car around to continue on our way, when Carol looked down at the camera which rested in my lap, and for some reason remarked: "Bet you didn't pull out the slide!" A retracing of my varied moves in making the view convinced me that I had not, so the process was repeated; only the jeers of the other two influenced me to snap the scene



SUNKEN GARDENS, BRACKENRIDGE PARK

RUEL MCDANIEL

as it was, rather than wait for another sight-seeing crowd to come and stand before the window and listen to the conductor.

The Mission loop led us to the Mission Burial Park, and, attracted by what looked to be an unusual building on the inside, we drove in and photographed it. The exterior was finished in white, so that I speeded up the time to 1/75. The diaphragm remained at F/11.

"There's something unusual in the way of advertising," I remarked as we drove out of the cemetery, for directly in front of us there was a large billboard bearing the name of a local church. It had a painting that blended with the purpose of the advertising and was erected, the pastor of the church afterwards told me, in the hope of lightening the burden of sadness that weighed upon bereaved relatives as they left the cemetery after a burial. The advertisement, the pastor said, had brought the church several adherents. So I photographed it. The camera had to face the sun for this, and accordingly I cut down the speed to 1/25 and opened the diaphragm to F/8.

We continued around the Mission loop, ran upon some excellent camping-places along the sparkling, clear San Antonio River; but found nothing that quite came up to our requirements for the first Graflex pack. The return run led

us through a part of the Mexican quarter of San Antonio, and here we opened wide our eyes for suitable subjects.

As it was Sunday, we were unable to get any views of Mexican shops that ordinarily are so interesting; so our first picture in the Mexican section was of the great open-air Chili Plaza, in the heart of the Mexican business-section, near the public market. Seemingly, too, this is quite a social center on Sunday. Here a space the length of a full city-block and half as wide is made into a great open-air dining-room and kitchen combined. Row upon row of tables, most of them uncovered, line the place, and the little chili pots stand beside them. The Mexicans from all over town congregate here on Sunday and in the evenings and eat chili and talk over the latest scandal from Mexico. There is a man or a woman who guides the destinies of each table, and there is a separate chili-cooking pot for each table.

We pulled up near one of the most refined appearing of the chili tables, one that had a clean white cover upon it, and took a vote on the advisability of taking our evening-lunch; but the measure was sadly defeated. Then I induced Carol and George to look longingly toward an old-like Mexican who was in the middle of his chili dinner, while I snapped what



MEXICAN POTTERY SHOP, SAN ANTONIO

RUEL MCDANIEL

I saw through the camera. As it was growing slightly late, I opened the diaphragm to F/5.6 and gave it 1/75 of a second.

Over in a park to the left of Chili Plaza was a crowd of Mexican men gathered around what appeared to be a recent arrival from Mexico, and who seemed to be preaching. We pulled the automobile up along the curb and I made a picture of this crowd. It was in a heavy shade, and I made the exposure 1/25 of a second and cut the diaphragm down to F/11. From this position I also snapped the Mexican market, on the opposite side of the street, with the speed increased to 1/50.

From Chili Plaza we rushed out to Brackenridge Park, for we felt that it would be an injustice to the new Graflex to use the first pack without giving it a chance to show what it could do with the Sunken Gardens, the "Drowning Gardens," George insisted upon calling them. The only reason that the Sunken Gardens have not been photographed as many times as the Alamo is because they have not been there so long.

We sped out Broadway, wound around several paved roads that seemed to lead nowhere in particular, climbed a steep, rocky hill and finally found ourselves looking down upon the Sunken Gardens from an elevation of about one hundred feet. The visitors winding down around the

delightfully crooked paths through the garden, and sitting in the Mexican Village Café on the other side of the Gardens provided ample animation for the picture, I concluded; so I set the diaphragm at F/11, gave 1/50 of a second and snapped.

Driving down the hill on the opposite side, we ran into the edge of the Mexican Village which is centered around the big café which adjoins the Sunken Gardens. Here we came up to an old adobe-and-rock hut which housed a Mexican pottery shop that appealed to us. We pulled up in front of it and I set the camera at F/8 and 1/50, it being rather dark under the improvised porch of the hut. Then I strolled over to the old Mexican woman who sat in front of the shop. "I want to make your picture," I told her.

"No sabe, Señor!"

But I have a sneaking feeling that the señora understood better than she would have led me to believe, for as soon as I stepped back and began to focus the camera she disappeared inside, turned on the phonograph that chanted a Mexican song and refused to come out even upon George's pretensions of wanting to buy a piece of her pottery.

After this disappointment, we decided to go back to the city and photograph the Alamo; but not before I made a picture of George and Carol in the act of riding one of the park burros around

the steep and crooked course. This scene they refuse to allow me to discuss.

Now for the final and most important shot, for we were now back in front of America's most famous old Spanish mission. We drew the car up in front of the Alamo and I stepped back toward the center of the Plaza and got my focus.

"Be sure you include the wash-tubs!" Carol yelled, just as I was ready to release the shutter.

Then I had to re-focus so that the three big

much diaphragm-opening and too little time, resulting in poor detail in the background, which I especially wanted to show up. The preacher and his congregation in the park could have been improved upon if I had stood closer and had given it more time. The market building did not materialise at all. The print was blank; evidently I forgot to remove the slide, but I feel certain that I did remove it.

The Sunken Gardens suits me well enough, but



THE ALAMO, SAN ANTONIO

RUEL MCDANIEL

galvanised wash-tubs that Texas ingenuity has provided along the electric light line to serve as reflectors, to make the light shine brightly upon the front of the edifice at night! I gave this $1/50$ at stop $F/8$.

None of us could rest peacefully until the finished prints came back from the photo-finishers the following day; and I have not been allowed any restfulness since!

The first print showed unmistakable evidences of light-damage. Seemingly, this was the fault of the printer. It was useless. Number two—San José—I was proud of, and still am. The field building in the cemetery was good, but I could have improved upon it by standing nearer. The church billboard was a disappointment, for I gave only about half enough time to counteract the heavy shadow that was cast by the sun.

The Chili Plaza view was poor. I gave too

Carol insists that we photograph it earlier in the day so that we can show more detail in the far background. The Mexican pottery shop would have been a fair shot if the señora had consented to pose; as it was, we got only an example of the Mexicans' utilisation of waste material—old stones, tin and boxes—for building their huts.

The next snap did great credit to the burros and to the camera, but I am forbidden to reproduce it. The Alamo would have been better if I had cut down on my time slightly. The wash-tubs showed up well!

So that's the fate of my first Graflex pack. With all my practice, I have not yet been able to make the old companion talk; but, as my friend assured me, it is getting to where it does almost everything else; and I am still holding out hopes that I can teach it to talk some day! With more practice and longer acquaintance it can be done.

An Empty Nest

AGNES BARNEY YOUNG

A DREAR wind blows about the modest home,
The raindrops tapping on the window-pane,
Like youngsters gay at Hallowe'en,
When at their merry tricks again.
Alone, an aging couple sit—
No urgent task for willing hands,
For, long ago from out the nest
Their birdlings flown to distant lands.
Upon the table lying there
An album old, some pages torn
From constant turning by the hands,
That in love's service grew so worn.
And now they open it again,
And with the same old hungry look
They turn each page, and linger long;
It's *all* they have—the snapshot-book.
They looked upon it as a whim,
When for a camera they teased,
That jolly brood that grew so fast,
And pestered 'till they were appeased.
There's Joey with his little steer
He broke to take them out to ride;
The old sled still beneath the barn—
Yes, Joey was the one who died.
And Mary's tangled curls are loose
And hang about a laughing face.
She was a mischief, you would know;
And, yet, the picture's full of grace.
Grave Jimmy, always thoughtful-like,
Is reading 'neath the apple-tree.
A diplomat who lives abroad—
His folks he cannot often see.
The frisky twins, gay Ruth and Beth,
Are taken mixing up mud-pies.
Both teachers of Domestic Arts—
They're twenty-eight—Oh how time flies!
They all came home one summer-day,
And on the lawn were "snapped" together.
The only time that they could meet—
'Twas lucky it was pleasant weather.
A history of childhood-days;
Rare glimpses of fair, youthful flowers;
A bit to carry to the end
For father's, mother's empty hours.
The clock strikes nine, and says bedtime;
All gone the lonesome, hungry look.
For one whole hour, they've had their brood.
My friend, have you a snapshot-book?



AN ECLIPSE OF THE SUN

JOSEPH R. IGLICK

Lenses for Wide-Angle Work

THE technical photographer who is selecting lenses for wide-angle work, either indoors or out, has today a more difficult task to pick out instruments of suitable focal length than his predecessors, who had a much more limited range of choice. When only rapid and wide-angle rectilinears or symmetricals were available, it was customary to indicate in price-lists and advertisements the size of the largest plate which could be covered with the smallest diaphragm. This very useful information is now omitted from most catalogs, the words "size of plate" or "plate recommended" being substituted. In most cases this size is very much smaller than the lens will really cover, so that the would-be purchaser is likely to procure a lens of a larger angle than he needs. It would be a convenience, if in the list of lenses capable of embracing a wide

angle, the extreme size of the circle illuminated were given; but failing this, there is nothing to be done but to make an examination of any lens offered which may appear to be suitable and act upon the result. In such a connection it is useless to decry the making of wide-angle photographs. In certain circumstances, nothing else will be acceptable.

It must, however, be understood that the diameter of the image-circle is not in itself a sufficient guide; it will be found that some modern anastigmats, although admirable over a moderate angle, will not give passable definition to the edge of the circle with the smallest stop. Therefore, the ground-glass must be the final resort, and as few photographers have access to an optical bench, the test must be made upon the plate which it is desired to use. In doing this, great care must be exercised to get the back and front of the



CONGRESS HALL, PHILADELPHIA

A. C. G. ALLISON

HONORABLE MENTION—ARCHITECTURAL SUBJECTS

camera truly parallel and in placing the lens accurately opposite the center of the screen. As the covering-power of a lens is increased by focusing upon a near object, a distant one should be chosen, a row of chimneys or tree-tops at a distance of a hundred yards will answer well. The center of the image should be accurately focused with the aid of a magnifier and the distance for sharp definition at full aperture noted. The magnifier should then be shifted to the margin of the ground-glass and an attempt to obtain sharpness made by re-focusing. If good definition can be obtained by racking in slightly, little or no astigmatism is present, and even definition can be obtained by using a small diaphragm, and focusing midway between the center and margin of the plate. If astigmatism be present, sharp marginal definition cannot be obtained by focusing at full aperture and the defect cannot be entirely removed by stopping down. As few subjects are on one plane, curvature of field is a less serious matter than astigmatism, and with some, such as interiors and street-views, may even be an advantage. The camera-front should now be raised to the utmost and the lower corners of the focusing-screen inspected to see whether they are now illuminated. If so, well and good, as the swing-back will not have to

be used to such a great extent; but if not, the whole adjustment of the image will have to be made by tilting the camera and swinging the back.

It is usually necessary to remove roller-blind shutters which are fixed to the camera-front as the woodwork of these frequently cuts off a large proportion of the field; sometimes a lens which is capable of covering 10×12 will not illuminate a $6\frac{1}{2} \times 8\frac{1}{2}$ to the corners for this reason.

When a lens is advertised as covering a certain angle it should be ascertained whether this is measured along the longest side of the plate or its diagonal. In the case of a 5-inch lens used upon a $3\frac{1}{4} \times 5\frac{1}{2}$, the angle is in the former case 66 deg. and in the latter 77 deg. As a rule, it is safe to assume that the angle is that of the diagonal of the plate.

The intensity of the illumination falls off very rapidly when wide angles are included, particularly if the aperture is fairly large. In cases where the entire circle of the diaphragm-opening can be seen from the corners of the field at an angle of 90 deg., only one-fourth the illumination which reaches the center of the plate reaches the corners; at 60 deg., one-half; at 40 deg., three-quarters, and if any portion of the circle is cut off by the lens-tube, the difference is greater.

The British Journal.



WATCHING THE POTATOES
C. ULRICH, J. S. ZN.





EDITORIAL



Prices of Pictorial Photographs

THE demand for pictures for mural decoration in the home has caused considerable attention to be directed to enlarged photographic prints made by pictorial workers. Heretofore, the worker in pictorial photography has been satisfied to prepare one or more bromide enlargements, or even smaller contact-prints, for his personal use, selecting some of his favorite negatives for this purpose. He has also used them as convenient gifts for Christmas, weddings, birthdays and other occasions, and as such they have proved to be very acceptable. Indeed, in many instances, an artistic print of an attractive subject has afforded the recipient quite as much pleasure as an oil-painting, watercolor or pastel. This is no cause for wonderment, particularly when one considers the absence of genuine pictorial beauty in some of the latest expressions in art, which are conspicuous for bad drawing, bad perspective and worse thematic substance. Compare one of them with a carefully made bromide print of an attractive subject, or a skilfully executed gum-print or bromoil-transfer! Here there is nothing to irritate the refined sensibilities of a discriminating picture-lover—nothing to cause him to ask, “What on earth is it?”, or, “Is this meant to be funny?”

We have seen pedestrians pass along a Boston business-street, stop a moment to glance at some ultra-modern paintings in the window of an art-store and, a few minutes afterwards, linger long at a photo-dealer's window while admiring a one-man show of pictorial photographs by a Hanson, a Wentworth or an Akasu. On a similar occasion, the display consisted of a series of beautiful bromoil-prints by R. E. Hanson, in two sizes—11 x 14 and 16 x 20 inches. The prices in each instance were very moderate—from five to twenty-five dollars each for the bromides, and twenty-five to thirty-five dollars each for the bromoils, according to the size of the prints. The sales-prices which prevail at the large exhibitions, however, are sometimes very inadequate. This was true of the last American Salon held at Pittsburgh, and has particular reference to the six 11 x 15 bromoil-transfers by that eminent artist, Léonard Misonne. They were quickly sold at fifteen dollars each, this absurdly low sales-price having been fixed by the artist himself.

M. Misonne is a civil engineer by profession, and photography is his chief recreation.

Among other prints sold at this exhibition were one each by Albert E. Schaaf (bromide), Rupert S. Lovejoy and Francis O. Libby (gum-prints), at twenty-five dollars; one, a bromide, by H. O. Mettee, at fifteen dollars, and one, a bromoil, by A. D. Brittingham, at ten dollars. On the other hand, four delightful subjects (bromides) by Forman Hanna were sold at five dollars each, three small bromoils by Ernest M. Pratt at ten dollars each, and two little gems (bromides), by Millie Hoops, five dollars each.

It is also interesting to note the prices of prints, most of them of outstanding merit, that remained unsold. William Gordon Shields, two gum-prints—the highest-priced—thirty dollars, each. Nicholas Muray and Otis Williams, chlorides; Viroque Baker, Alfred Brinkler, J. Harold Leighton, Rupert S. Lovejoy, and F. O. Libby, gums; W. E. Dassonville, Geo. H. High, and Chas. Lederle, bromides, and C. J. Symes, oil-transfers—were twenty-five dollars, each. Laura A. Armer, bromides, Theron W. Kilmer and G. W. Harting, chlorides—twenty dollars, each. Louis Fleckenstein, chlorides; H. L. Mettee, bromides, and Jane Reece—fifteen dollars, each. P. D. Anderson, Clark Blickensderfer, Anne Brigman, and Walter P. Bruning, chlorides; Joseph Petrocelli and Thos. O. Sheekell, bromides—ten dollars, each.

From this, successful workers in the various mediums may draw their own conclusion. One factor, however, appears to have been overlooked, namely, the question of permanence of the exhibited print. This may prejudice a prospective purchaser of a fine print, in whatever medium it has been prepared. He is morally certain that a small watercolor or pastel, purchasable at the same price, will remain unchanged for many years. Photo-pictorialists, who sell their prints, should be eager to allay the suspicion that their productions are of a fugitive character. The notice, “Guaranteed permanent”—if it can be made truthfully—ought to appear on every print offered for sale. In any event, it might be well for exhibition-committees to entertain this suggestion, also to co-operate with exhibiting pictorialists regarding the adjustment of sales-prices, for the benefit of the capable and conscientious pictorial worker.



ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.
2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.
3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.
4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.
5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.
6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.
7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.
8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for two years thereafter.

Awards—Advanced Competition

Architectural Subjects
Closed October 31, 1924

First Prize: Don C. Coleman.
Second Prize: Theodore Eitel.
Third Prize: W. P. Woodcock.

Honorable Mention: A. C. G. Allison; Wm. G. Bell; A. Caskey; L. J. Creegan; Andrew Ewing; Miss G. Finnie; N. W. Goodwin; Mrs. H. R. Jarvis; George Kellermann; Warren R. Laity; Harry R. McKellor; J. A. Bogas; A. T. Russell; Walter Rutherford; John O. Scudder; Frederick Simpson; Francis A. Snell; O. R. Mills; W. C. Swett; J. Vildensky; Herbert L. Wallis; Alfons Weber; Newton Wright.

Subjects for Composition—1925

"My Home." Closes January 31.
"Miscellaneous." Closes February 28.
"Indoor-Genres." Closes March 31.
"Table-Top Photography." Closes April 30.
"Artificial Light Photographs." Closes May 31.
"Miscellaneous." Closes June 30.
"Front-Cover Illustrations." Closes July 31.
"Real Sunrise and Sunset Pictures." August 31.
"Wild and Cultivated Trees." Closes September 30.
"Miscellaneous." Closes October 31.
"Lakes, Rivers and Brooks." Closes November 30.
"Interesting People and Places." Closes Dec. 31.

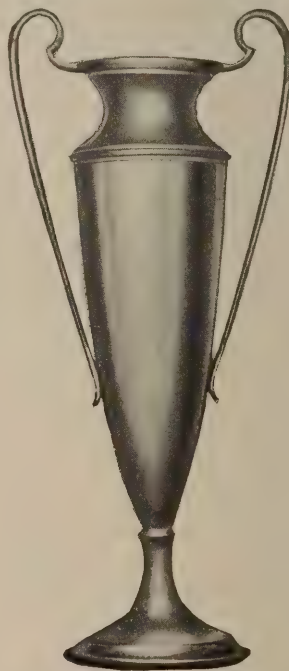


Photo-Era Prize-Cup



A HOUSE IN OLD BACHARACH
DON C. COLEMAN
FIRST PRIZE — ARCHITECTURAL SUBJECTS



SPRING-HOUSE

THEODORE EITEL

SECOND PRIZE — ARCHITECTURAL SUBJECTS

Advanced Workers' Competition

CHARM and distinction of subject, beauty of composition and excellence of technique are the salient features of "A House in Old Bacharach," which embellishes the preceding page. There is much to admire in this typical view of the old and quaint little town on the left bank of the Rhine, near famous, picturesque landmarks which include the rock of the Loreley. The artist has managed his wealth of material with consummate skill, subduing all to the pre-eminent point of interest—the old, plastered dwelling-house with its overhanging stories. Even the little stream, which issues from beneath the ancient stone-arch, is not too assertive. Though the quaint little house is placed just above the center of the enclosure, the surrounding objects, treated in a low key, mitigate what otherwise might seem an error in composition. This harmonising of conflicting sources of interest is due mainly to the position of the sun during the exposure. Imagine the light to have come from the right or the left of the picture! The result would have been unsatisfactory to the artist, who, while serving with the American Army of Occupation in Germany, as official photographer in the corps of Engineers, was able to select his own light.

Data: May, 1919; 3A Graflex; $7\frac{1}{2}$ -inch B. & L. F/4.5, Tessar lens; Eastman roll-film; enlarged from part of negative, on Gevaert Novabrom, K 7 Normal Buff Bromide; part of exposure made in the regular way, and completed by covering the lens with a Kodak Pictorial Diffusing Disk.

It is many years since that master of wood-interiors, Theodore Eitel, has found time to favor PHOTO-ERA with one of his delightful creations. Unable to resist the call of the "Architectural Subjects" competition which, in its scope, included so humble a subject as a cottage or a bird-house, Mr. Eitel entered his picture of the Spring-House and—straightway captured a prize. Placed wisely a little away from the pictorial center, and nestling cosily among the trees, the picturesque little structure exerts an irresistible charm and is a delight to look upon. Being illuminated by a prudently chosen light, it is gently but clearly relieved against the enclosing foliage, while the shadow-side of the nearest trees face the beholder. With artistic discretion, Mr. Eitel avoided placing this principal object of interest in the middle of his picture-area.

Data: April, 7.30 a.m.; $6\frac{1}{2} \times 8\frac{1}{2}$ old model R. O. Co. view-camera; $19\frac{1}{4}$ -inch B. & L. Zeiss Protar; stop, F/12.5; soft light; $\frac{1}{2}$ second; W. & W. Panchromatic plate; pyro; contact-print on Haloid E Smooth Portraya.

"The Gate" is a subject with ingratiating qualities. The Mohammedan arch (Kotah, India) is a structure of rare beauty and afforded the discerning artist, W. P. Woodcock, an opportunity for a noble pictorial conception, one which abounds in life, scale and character, thought and feeling, and a judicious mixture of light and shade. Unable, perhaps, to select a different viewpoint—to view the gate obliquely—Mr. Woodcock boldly placed himself squarely in front of his subject, thus revealing a pleasing view of the peopled street, beyond, the delightful atmospheric



THE GATE

W. P. WOODCOCK

THIRD PRIZE — ARCHITECTURAL SUBJECTS

quality of which was lost in the reproduction of the photograph, which possessed an agreeable buff tone. The sunlit foreground is distinguished by a feature which virtually makes the picture—a native on horseback about to pass through the gate. With conspicuous skill and rare judgment the artist has managed this incident. A moment earlier or a moment later—and the opportunity would have been lost. Moreover, the rider is favored with a white costume, and this circumstance must have been hailed with satisfaction by the vigilant artist. The novice in pictorial composition has but to eliminate the rider and his horse, temporarily, and he will notice at once how indispensable they are to the success of the picture.

Data: May, 11 A.M.; bright sun; Aldis Anastigmat; stop, F/8; 1/30 second; Ilford Special Rapid Plate; pyro-soda; enlarged on Eastman Portrait Bromide "E" Rough Lustre.

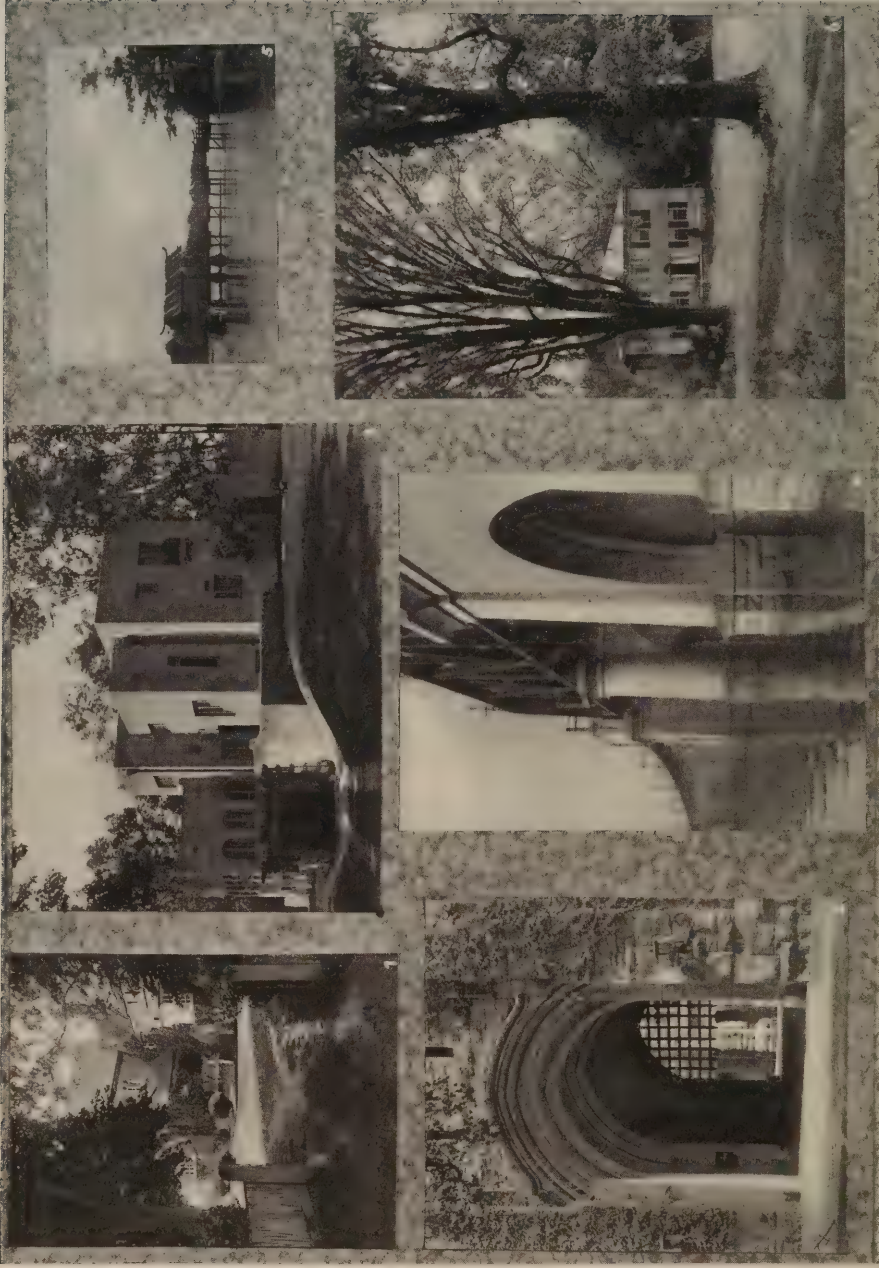
WILFRED A. FRENCH.

Have You Subscribed for 1925?

Now is the time to renew your subscription to PHOTO-ERA MAGAZINE. If you have not done so, please consider this a gentle reminder. Thank you.

The Speed of Short-Focus Lenses

It is generally supposed that lenses of the same relative opening have necessarily the same speed; but that is an error. One is apt to forget that there are other factors besides the relations of the opening of the diaphragm with the focal distance which affect the luminosity. There are two that are of considerable importance: first the loss of light by reflection from the surfaces of the lenses, and then the loss by absorption in the mass of the glass. Let us suppose two lenses of identical models with the same relative opening, but of different focal lengths. The loss by reflection will be about the same for both, but that due to absorption will be different by reason of the different thickness of the glass used. A lens of 6-inch focal distance is more speedy than one of 12 inches, even if they have the same openings and optical combinations, because in the short-focus lens the light has to pass through a thickness of glass one-half less. It is always difficult to determine exactly the difference of luminosity of two lenses, for it is also necessary to take account of the kind of glass they are made of and the rays they absorb. *Photographie Moderne.*



SELECTED HONORABLE MENTION PICTURES — ARCHITECTURAL SUBJECTS

1. *Surrey Manor House*
Herbert L. Wallis
2. *Grim Granite Softened by Ivy*
L. J. C'reegan
3. *A Modern Home*
Walter Rutherford
4. *Over the Harlem*
John O. Scudder
5. *Where Dreams Are Born*
W. C. Snett
6. *Old House at Westmoreland*
Dorothy Jarvis



SUBJECT FOR NEXT COMPETITION

ADVANCED WORKERS



Advanced Competition—Miscellaneous Closes February 28, 1925

WE call attention to the new list of competition-subjects for 1925. This list was made up after careful consideration and the co-operation of many subscribers in all parts of the country. To be sure, the list will not please all, nor do we claim that it is perfect. However, we do believe that it is an improvement and that it may lead to better ones in the future. There are two decided "schools" among our readers—those who like a definite subject each month and those who prefer to have every competition "miscellaneous". We are neutral. If one or the other group can convince us, by a large majority of pictures entered, that their form of competition is best, we shall be glad to fall right into line and make every competition "miscellaneous" or with a specified subject. We put it up squarely to our readers to settle the point. We have included three miscellaneous competitions for the year to give those who want them an opportunity to prove that the selected subject competition is not so popular. We now await the returns.

During 1924, interest in these competitions was shown by a gratifying increase in the number of pictures submitted by workers of unquestioned ability and standing as pictorialists. Moreover, new arrivals in the ranks of enthusiastic amateur photographers sent in pictures and won prizes and Honorable Mentions. We are glad of all this and feel that we have made some progress. However, we do not feel that we have attained that degree of perfection for which we are striving. We expect to do more in 1925. New Year's resolutions are good, especially if kept. We do not purpose to make any resolutions; but we shall strive to make this department one which has a dignity and a good-fellowship of its own. This cannot be produced artificially, simply by awarding prizes and Honorable Mentions. Money never yet bought the best things in life, and it never will. If good-fellowship, individual pleasure and photographic progress come from these competitions, it is because we are all working together for the love of it. Prizes and rewards can never take the place of that splendid enthusiasm which comes straight from the heart.

The intelligent and well-equipped camerist need not go far to obtain real pictures of permanent value to himself and practical interest to others. Although landscapes are always of artistic value and interest, it should not be inferred that home-portraiture, outdoor-and-indoor genre, still-life, marine, camp, architectural, nature, speed and other pictures are unwelcome. However, "record" photographs are not desired in this competition. Try to decide whether or not the photograph you intend to send is of more than personal or local interest. This particular point is for every camerist to remember in all his work for public exhibition, at camera-clubs or in the press. Let him bear in mind that there is a great world beyond his horizon that cares nothing for him unless he touches a sympathetic chord—something in common with what we can all comprehend and enjoy.

The Miscellaneous Competition offers an exceptional opportunity to the worker who is waiting for the psycho-

logical moment to enter the ranks of the "arrived" pictorial and technical photographers. There are many readers of PHOTO-ERA MAGAZINE who have profited by our efforts to make photography—artistically and technically—appeal to the man or woman who desires a mode of expression that meets, in great measure, the yearning for the highest and best in art and nature. We admit that we do aim high. Sometimes, we are reminded to "come back to earth"; nevertheless, we have noticed that many beginners have become first-prize winners in these competitions and that they have given our editorial efforts full credit for their own steady progress and final success. Now is the psychological moment for ambitious beginners who have won their spurs in the Beginners' Competitions to enter the larger field offered by the present competition.

The matter of the best presentation is one that demands your best critical judgment as well as your best executive ability. A print may be flawless, technically, and yet fail to make an appeal to the emotions of the beholder. On the other hand, a print which in reality is faulty on the technical side, may be filled with poetry and mystery—gaining and holding the interest which the merely literal could never arouse for a moment. Above all, remember that your picture represents *you*, and that it will make its appeal in proportion to the time, thought and skill that you put into the making of it. In literary work, the student is advised to select subjects that interest him and of which he has direct knowledge. Unless he adheres to this excellent advice, he is very apt to write an article or story that fails to interest the reader because of its lack of personality and authority. Virtually the same advice applies to you ambitious workers. If a beautiful landscape appeals to you, and you portray it truthfully, the picture will arouse in the beholder the same delight that you experienced when you beheld the subject.

We begin the year 1925 with what one subscriber called "a pictorial free-for-all". He referred to our Miscellaneous Competition. In a sense, he is right; although at this season of the year, when "peace and good will toward men" is in the very air, we wish to assure our readers that there is absolutely nothing of an aggressive or warlike spirit in this "pictorial free-for-all". Our friend had in mind the freedom which a Miscellaneous Competition always gives to the worker. In short, whatever he considers to be a good picture is eligible to this competition.

The individual cannot hope to be a master of every branch of photography. He may become a specialist in portraiture and eventually attain fame; but he cannot be a master of portrait, marine, landscape and nature photography—that is, not as a rule. Now, if he sticks to his portraiture, another to his marines, and still another to landscapes, each will function efficiently in his special sphere and all together they will promote the growth and success of photography. By finding himself, the camerist will eliminate the deadwood of purposeless experimenting and will be enabled to focus his heart and mind on the attainment of the highest and best in the special field he knows to be his own. The work that a man or woman loves to do is very apt to be the work that he or she can do best.

A. H. BEARDSLEY.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$5.00.
Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of not more than *two years'* practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous
Closed October 31, 1924

First Prize: Mrs. C. W. Gibbs.

Second Prize: Lieut. A. E. McKenney.

Honorable Mention: James Bell; John H. Kemp, Jr.; Stanton G. Long; Henry A. Lyner; Lucille Meyer; Shiger Tada.

How is your Courage?

FOR the past year there has been a steady and very gratifying increase in the number of beginners who have entered prints. Moreover, many who have never had the courage before have entered pictures and won prizes or Honorable Mention awards. It seems to me that we have really made some progress and I know that I have had the pleasure to add many delightful correspondents to my list. However, this department does not yet measure up to its capacity or to its real purpose. There are still far too many readers who appear to be diffident and who will not make the necessary small effort to join our membership and receive the benefit of a sincere desire on our part to be of service. Read the new rules carefully and note that virtually every one can easily meet the requirements.

There is one thing that I should like to emphasise and that is the tendency of many beginners to belittle themselves and to assume that they are not entitled to so much consideration as those who have attained the proud title of advanced amateur or pictorialist. I have many letters which bear me out in this statement; and I believe that this tendency should be met by a cordial welcome to such a department as this, where humble efforts are appreciated and encouragement is given. I believe that every photographic magazine should not forget that in the beginner lies the future of photography—as he succeeds, so will it grow.

Within a few weeks a number of beginners have mustered up their courage to the point where, with seeming fear and trembling, they have thrown caution to the winds and sent in a picture to our Beginners' Competition. In each case it was the first picture they ever sent to any competition. Much to the amazement of the senders they received recognition at the hands of the jury—some received a prize and others an Honorable Mention. The pictures merited the awards; and, I venture to say that there are many readers who would have an equally good opportunity to win an award, provided that they would overcome their fear or lack of confidence.

The point that I would like to drive home at this time is the advisability to venture boldly into the photographic world and to do so with confidence and a willingness to profit by experience. How many times I hear a remark something like this: "I don't see how Mr. A ever got a prize for *that* picture! Why, look here, this one that I made last summer is better composed and better printed in every way. Either the jury didn't know anything about photography or Mr. A has some pull. I bet that my picture would have won a prize, had I sent it in!" That is just it; had he



STILL-LIFE

MRS. C. W. GIBBS

FIRST PRIZE — BEGINNERS' COMPETITION

sent it in—but he did not, and he continues to complain about the juries and their awards. If his pictures really have the merit that he claims for them, why should he be afraid to enter them in a competition? I would suggest the same energy that characterised, I believe, James Fenimore Cooper, who read a certain book with disappointment and said, "I can write a better book than that myself". And he did!

Another point I should like to mention is the one which relates to possible discouragement. Let us suppose that after reading this editorial you decide to make a print for this competition. You send it in with mingled hope and fear. You wait eagerly for a possible prize or Honorable Mention—but none arrives. Moreover, the picture comes back with a criticism which may or may not seem quite fair. What is your reaction? Will you assume that the jury was blind to real merit, that the criticism was unjust and that all such competitions are a snare and a delusion? Or will you accept the jury's verdict with good nature and study the criticism carefully and decide to send in another picture to the very next competition? To be sure, juries and critics are human, they make mistakes; and for this very reason their verdicts and opinions—although worth careful consideration and valuable to every beginner—need not be taken to be final. Because one or several attempts seem to be fruitless, it should not be assumed by a beginner that he is doomed photographically. Rather let him smile cheerfully and go to it again, and again. I have known individuals—who are today regular contributors to the leading salons and who are winning awards—who were turned down time and again; and I have seen rather harsh criticisms of their pictures, too. Did they quit? Emphatically, no!

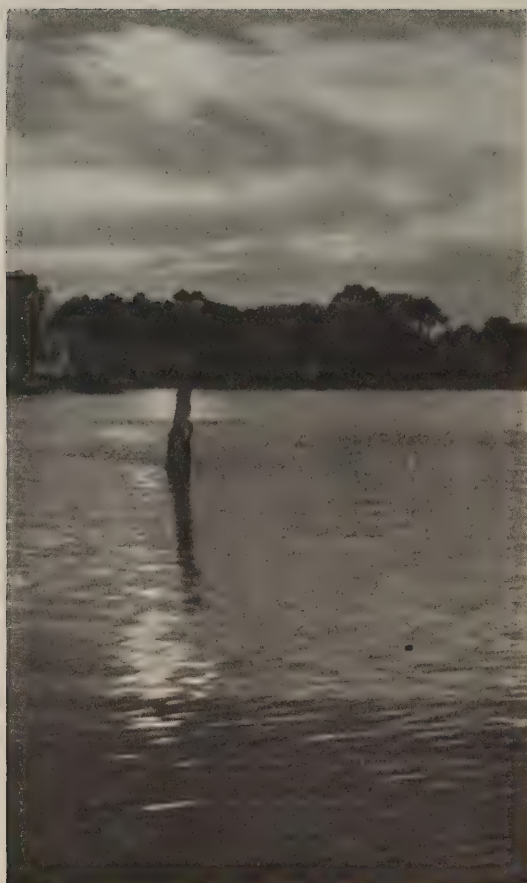
A. H. BEARDSLEY.

Beginners' Competition

THE chief merit of Mrs. C. W. Gibb's still-life, shown on this page, consists in the beauty and simplicity of its composition—the happy combination and balance of parts. How easy it would have been for the artist to add a jar, cup or a vase and other convenient objects, thus overloading the group; but she wisely refrained. Of course, it would have been better if the shallow tray, at the right, had been even a little lower in tone; but to have placed the main object, the lighted lamp, well away from the center of the enclosure, and balanced it by a small object, plausible and artistic in character, speaks greatly in favor of the promising artist.

Data: September, 9 P.M.; light, two 60-watt lamps; 4 x 5 Korona camera; 12-inch Pullman R. R. lens; stop, F/32; 2 minutes; Gevaert Sensima Mat Film; E. K. Special Developing Powders; print, Gevaert Novabrom No. 10 Glossy.

"The Mooring" also makes its appeal to the discriminating beholder by reason of the beauty and simplicity of its composition. It is hard to believe that the photographer, Lieut. A. E. McKenney, has used a camera practically for only two years—or less, for his picture indicates mature knowledge of artistic principles and mastery of his photographic equipment. The slight uniform diffusion, which characterises the picture, is very pleasing and gives the picture a degree of atmosphere and a sense of restfulness. The spacing could not be better. The sky has character, interest. The same may be said of the water. The distant shore is relieved from extreme, featureless blackness and the water-line is level. The values are excellent.



THE MOORING LT. A. E. MCKENNEY
SECOND PRIZE — BEGINNERS' COMPETITION

Data: Made at New Castle, New Hampshire; August 20, 1924; 4.45 P.M.; Icarette D camera; Carl Zeiss F/4.5 Tessar; stop, F/22; 1/50 second; Agfa roll-film; developed in Kodak tank with pyro; print, Enlarging Cyko. WILFRED A. FRENCH.

Have You Subscribed for 1925?

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When I Made Baby's Picture

J. E. Melton

The first picture that I ever made
Was of a great big tall elm-tree;
With creek and hills in the back-ground
At least a good half mile from me.

The second was made of the baby—
But I found when it was too late,
That the first and second exposures
Were made on the very same plate.

I finished up one of the pictures—
Just wanted to see how 'twould be;
Then I saw that baby was scattered
From the hill-top back to the tree.

His left hand stuck out from a knot-hole
Way up about sixty feet high—
The other was perched like a rainbow
Three hundred feet up in the sky.

One eye was way up in the tree-top
But the other gave me a chill;
When I saw it half a mile away,
Stuck onto the side of a hill.

One foot was near the base of the tree,
The other was out on the sands;
Over three hundred yards away
From his dear little chubby hands.

I am going to save this picture
So that baby can have a smile;
When he grows up he can see himself
Scattered out for half of a mile.



OUR CONTRIBUTING CRITICS



NEGLECT

A. L. OVERTON

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

"NEGLECT" tells a story of the lack of care shown by many farmers toward their implements, and as an illustration of this it should be acceptable to more than one agricultural publication. It is rather a nice point, however, as to whether all objects which may be made to tell a story are capable of serving as pictorial material of an attractive character, and the farming-implement here shown is a case in point. Slightly different arrangement of the material shown in the photograph under consideration would have resulted in a better balanced composition, however, and strengthened the illustrative value. First; the machine should be further from the left-hand margin, let us say about one-third the length of the picture. Second; the dark mass of evergreen trees immediately above the machine destroy the dark accent which should be placed in the latter and also adds to the already "lop-sided" tone-spotting of the composition. This might have been prevented by a change of viewpoint. Third; a more subdued distance, together with a darker gray sky, would have increased the forsaken appearance of the machine by concentrating more fully the spectator's interest upon it as an isolated object amid the expanse of snow. In the matter of photographic technique, the picture is above the average snapshots of winter-effects, excellent "values" being shown in both snow and dark parts.

W. S. DAVIS.

ANOTHER example of two pictures in one; and in this instance they overlap so that it is impossible to separate them.

The farming-machine in the foreground is beyond a doubt being neglected. Alone, in this snow-covered field, it is or should be the picture of desolation; but supported, as it is, by a neat and well ordered landscape, this feeling of desolation and neglect is subdued, if not entirely lost.

Cut away the bottom portion of the picture up to a point one-eighth of an inch below the top of the seat, and you have left a very fair landscape. Cut away the top portion of the print down to the eave-line of the house, and you have a much stronger impression of neglect. But neither picture is satisfactory.

It it were possible to rephotograph the scene from a different viewpoint, having as a background open fields and sky, the result should carry with it a true impression of "Neglect".

SAMUEL B. PRIEST.



It is difficult for a man brought up on a farm to criticise a view like this. One's first impulse—or perpetual impulse—is to find and kick the fellow that left that valuable machine out all winter, exposed to neglect and destruction. The poor, down-trodden farmer, forsooth! And he is the chap that always wants governmental aid! No wonder he is "broke"!

As a picture, it is not much. I don't remember ever seeing snow so dark on a farm. It looks like city-snow—Pittsburgh or Chicago snow after forty-eight hours.



A BIT OF NEW HAMPSHIRE

EDGAR S. SMITH

YOUR CRITICISM IS INVITED

The heavy masses on the left have no compensating balance, and the slanting line of trees seems to lead up and out nowhere.

There is the making of a fairly good picture of about an inch and a half square in the upper right corner. If we had some more top to the trees and, of course, less foreground. The stark nakedness of those stately, leafless trees, the distant farm-house and a reasonable foreground of well-rendered and convincing snow ought to convey a veritable suggestion of nature in one of her impressive moods; but they don't!

And I can't help thinking all the while that three cents' worth of grease mixed with the refuse-oil from the farmer's crankcase would have saved that poor mower, if housed under a shed in the winter. Perhaps my indignation obscures my judgment.

E. L. C. MORSE.



THE ability to recognise picture-material is an accomplishment. Many see, but few perceive. In the making of the picture, "Neglect", Mr. Overton appreciated his opportunity. Here, he saw a violation of the humanities—a subject which would make an universal appeal.

The abandoned mower—the farmer's best ally in haying-time—stands in the meadow where it finished its work months ago—a prey of the elements. Rank ingratitude! But how to express it? Doubtless, the best viewpoint showed difficulties in composition—a light foreground, unbalance, topheaviness, excess of picture-material, an apparent tilting of the horizon-line. This was a time when rules must be disregarded and the effort must stand solely on its emotional appeal, with no pretense to beauty. Now its very imperfections become saving-graces. The distant farm-buildings where the implement should be sheltered, the row of leafless trees, and the poles and wires which mark the highway and give a perspective, the trackless expanse of snow-covered field—all emphasise the isolation and serve the spirit of the theme.

The tonal values are in harmony with the subject-

matter and the message it conveys. The undesirable prominence of the telegraph-pole could have been subdued by work on the negative. Trimming to any extent would mar the general effect.

Many camerists might make as good a picture of the subject as here given, but few would attempt it, and still fewer would have the courage to offer it for criticism.

J. W. ADAIR.



"NEGLECT" is clearly the result of a definite intention to convey an abstract idea, not merely to record a chance group of concrete objects. Mr. Overton has carried out his intention successfully. His picture unmistakably does suggest neglect. That is picture-making.

Personally, I wish that he had chosen a different viewpoint. I would have liked better just the mower and snow with one small accent for balance, possibly a corner of the careless farmer's house or barn. The general appearance of a dull, leaden day in winter lends itself well to the theme. It is of little importance that this is not consistent with the cast shadows of the post and mower.

B. H. JACOBS.



I SUPPOSE that we are all acquainted with the club-member who is suffering from fatigue when Saturday comes around. We have given this matter very serious consideration, and next season we are making arrangements for our secretary to call on them on Friday evenings, when he will fill up their plateholders. On Saturday a conveyance will be sent to bring them along to the meeting-place. The same conveyance will be available to take them home after the ramble is over. No doubt, some arrangements can be made whereby the secretary will also develop their exposures in his spare time, if this should be necessary.

DONALD SMITH in *The Club Photographer*.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



BEING a professional photographer, and a resourceful one, J. D. Hunting, of North Conway, N.H., seems to have a copious supply of artistic negatives typical of his locality, which is noted for scenery of great natural beauty. The subjects which he has contributed to these pages have been beauty-spots of the neighboring woods. Now, equally seasonable subjects emanate from his busy studio. These are winter-scenes of an unusual character, as exemplified by the present frontispiece, and page 17. While they suggest the superb scenery of the region, these photographs illustrate in a practical and at the same time, an artistic manner, the driving of dogs over the snow, as a winter-sport in the White Mountains. In the initial picture, the dog-team guided by the driver occupies a well-chosen position in the foreground, which, with the middle distance consisting of a wood of splendid birches and the background of typical New Hampshire hills, constitutes a convincing recession of planes. The succeeding two subjects are excellent examples of artistic discernment and painstaking technique.

Data: Made at Wonalancet, N.H.; subject, Arthur P. Walden's well-known dog-team; March, between 11 A.M. and 1 P.M.; strong sun; 5 x 7 Eastman Camera; B. & L. Tessar 7½-inch focus; no color-screen; stop, F/5.6; focal-plane shutter; 1/1000 second; Eastman Portrait Film, Super Speed; metol-pyro; enlarged P. M. C. Glossy.

Although the photographs of stellar phenomena, which illustrate part two of Mr. James Stokley's valuable series of articles, "The Camera in Star-Land"—pages 6 to 12—are purely technical in character, and of rare technical photographic excellence, they take the mind of the beholder far away—from our terrestrial sphere to celestial ones. It is an awe-inspiring subject, the application of photography to astronomical science, and it has been treated with remarkable clarity, simplicity and accuracy, so that it may be grasped easily by the lay-mind. The data which are extremely interesting, are included in the article.

Besides its irresistible charm, Kenneth D. Smith's baby-picture, "Interested", page 15, is distinguished by a feat in photographic technique. Few photographers would have thought to profit by one of a baby's favorite attitudes—lying on its stomach. Having a keen eye for the pictorial possibilities of unusual scenes and incidents, Mr. Smith quickly proceeded to engage the child's attention in an upward direction, awaited the propitious moment and made the result his own. This required uncommon artistic and technical skill, which Mr. Smith possesses to a large degree. In perpetuating this strikingly happy scene, the artist carefully avoided the common error of false perspective or extreme foreshortening, but shows the child's features in their true aspect, sweetness and beauty. There is not a trace of distortion in the up-turned face. The head is well modeled and rounded and, with wee folded hands, forms a delightfully realistic picture. One cannot but regret that in his eagerness the artist has neglected to delineate what I assume to be a pair of tiny feet encased in white woolen socks, and belong to our baby. With the exception of this undeclared detail, I have only praise for one of Mr. Smith's latest achievements.

Data: Made at New York City; April, noon; room with southern exposure; 3¼ x 4¼ R. B. Auto Graflex; 7¼-inch, Carl Zeiss Ic Tessar; stop, F/5.6; 1/20 second; Wellington Anti-Screen plates; pyro in tank; Enlarging Cyko Plat.

No traveler who has seen and admired this, one of the largest and best-preserved of England's many ruined abbeys, but will gaze lovingly on Warren R. Laity's poetic interpretation of Fountains Abbey. This well-known and much-visited architectural ruin is situated near Ripon, Yorkshire. It was a Cistercian monastery founded in the XIIth century and, together with many other ecclesiastical buildings, was destroyed by that royal vandal, Henry VIII. Mr. Laity put much feeling into his interpretation, and produced a print of remarkably beautiful quality. However, he could not resist the universal temptation to picture the reflection of his subject, and, in doing so, unavoidably included a large, featureless area of the sky, in the lower right corner. Now as his sky begins to darken at that point, it seems as if this gradation ought to show in the reflection—a circumstance which would have diminished the present extreme whiteness. Let us see what the reduction of the foreground by about three quarters of an inch would do. But one dislikes to suggest trimming so beautiful a print.

Data: Made in the summer of 1923; Butcher Carbine 3¼ x 4¼; Goerz Dogmar; at F/11; 8-time color-screen; 1/10 second; enlargement on Wellington Bromoil.

The snapshots of a rocky shore reflected perfectly in clear, placid waters, page 21, are interesting as topographical records. By being viewed vertically, they bear a close resemblance to totem poles, as cleverly illustrated by Charlotte B. Dunlap.

Data: 2A Brownie camera, in July, at sunrise, with the light bright. Exposure, ordinary snapshot of about 1/25 of a second.

To become a successful picture-maker in three months after having acquired a camera is a feat to be proud of. Such is the happy experience of thrifty Bessie O. Johnson as shown in her naïve and illuminating recital, and two examples of her proved pictorial ability shown on page 23. That these early efforts possess prize-winning qualities—as declared by the worker's "photographer-friend"—is not to be doubted for a moment! Unfortunately, they are not without shortcomings; and it is my "sad and solemn duty" to point them out, despite the fulsome praise already bestowed upon them. "Reflections" is very intricate in design; but is not extravagance in the use of material an ephemeral trait of nearly every young artist? It has been said that continence, repression and repose are the fruition of ripening years. The gnarled tree-trunk and "friend-partner", as a group, should be the main point of interest; but, according to the title, it is rather the reflection of this somewhat incongruous combination that should monopolise the observer's admiration. Now, if E. L. C. Morse, our valiant contributing critic, were to be asked—but banish the thought!

This perverted reflection, the fierce-looking tiger and several other imaginary creatures formed by the snow-laden rocks, tend to confuse the eye of the beholder, who may be tempted to ask for a true explanation of the camerist's motive in picturing this singular spectacle.

I am unable, myself, to give one; hence it were wise to refrain from further criticism. No data were provided.

It is quite different with "The Brook". Here, the title is appropriate and also less embarrassing. The irregularly coursing stream is an inviting camera-subject, although the numerous black spots on either bank are distracting, and the two trees facing each other across the brook are placed much too high in the enclosure. They would appear to greater advantage if one inch were taken from the bottom of the picture, which also would improve the composition, although a large portion of the stream would be lost thereby. *Que faire?* No data were provided.

The five photographs which accompany Ruel McDaniel's experience with a Graflex Pack, pages 24 to 28, appear as camera-records. The author does not pretend that they have pictorial merit. He seems to have made them rather as souvenirs, in view of the hurried manner he used his camera—motoring rapidly from place to place. The "Sunken Gardens" teems with interest; but if photographed in full sunlight it would look "spotty". Data in the article.

"An Eclipse of The Sun," page 30, is reproduced as an example of what one amateur caught with his camera in his attempt to photograph an eclipse of the sun. It is not claimed that this is the best result that could have been obtained; but it will serve as a helpful suggestion to those who are preparing to photograph the coming eclipse on January 24, 1925. Unfortunately, data are lacking.

"Congress Hall", page 31, possesses a degree of novelty on account of the hurrying and well-placed individual beneath the window. The picture would gain in pictorial value, were there more room at the top and bottom. If the picture has special significance because of the hurrying stranger, it is not clear to me.

Data: December, 10 A.M.; clear day; $3\frac{1}{4} \times 5\frac{1}{2}$ (No. 3A) Kodak; $6\frac{3}{4}$ -inch Tessar II b F/6.3 lens; used at full opening; 1/50 second; Eastman Speed Film; pyro; enlarged on Wellington Bromide through a Wollensak Verito lens.

In "Watching the Potatoes", page 32, we behold a masterpiece, by that successful photographer of Dutch interiors, C. Ulrich, J. Szn., inspired by the works of such painters as Israels and Blommers, our pictorialist was moved to use his camera with similar success. The outstanding note in this engaging composition is unity—the harmonious combination of parts. The woman bending over her kettle suggests the circular form of composition which has been a favorite with the great genre-painters; and yet the interest centers in the face of the figure which is filled with action. How perfectly, yet unostentatiously, the kettle performs its function of balancing the dominating source of interest—the Dutch housewife!

Data: September, 4 P. M.; diffused daylight; Mentor Reflex Camera; 140 mm. Cooke Anastigmat F/4.5; stop, F/5.6; 4 seconds; Wellington Iso Speedy Backed (9×9 cm.); pyro-metol; print, Kodak Royal Bromide (tinted) and worked up in bromoil.

Honorable Mention

THE beholder should be impressed by the variety and beauty of the architectural subjects grouped on page 38.

No. 1, by H. L. Wallis, suggests in general pictorial design and treatment Mr. Coleman's admirable first-prize picture in this competition, although quite different in thematic substance. The ample foreground has been wisely kept in a low key, but the mass of foliage too much so, as it departs from pictorial truth. Placed at the top of the picture-space or enclosure,

the buildings give the necessary idea of elevation which is well emphasised by the approach.

Data: In Surrey, England; August 11 A.M.; faint sun; Baby Sybil ($4\frac{1}{2} \times 6$ c. m.); 3-inch Ross Xpress; F/6.3; Imperial Eclipse Ortho; Azol; Wellington Cream Crayon smooth Bromide.

No. 2 rejoices in a pleasing title. The viewpoint has been well chosen, in that it displays the arch to advantage and produces a delightful vista to the sunlit court beyond. The lighting has been managed with pleasing effect throughout.

Data: West Point, N.Y.; August, 2 P. M.; bright sun; Ica Trona ($3\frac{1}{4} \times 4\frac{1}{4}$) camera; $5\frac{1}{4}$ -inch Carl Zeiss F/4.5; stop F/11; $\frac{1}{2}$ second; Agfa Film Pack; Metol-Hydro; enlarged on P. M. C. No. 8.

No. 3 excels in artistic treatment of a subject that is massive in character and devoid of external grace and charm. It is a study in shadows which have been used with remarkable skill and judgment. The superbly and consistently managed foreground, the enclosing foliage and the absence of annoying accessories are features that merit high praise.

Data: locality not given; bright sunlight; 8×10 view-camera; Wollensak F/6.3 Anastigmat; at F/22; 3 seconds; Commercial Ortho Film; M. Q.; print, Defender Contact Professional White Rough.

No. 4 affords ocular delight by its dominating feature—the perspective of Harlem Bridge and its reflection. The spacing and lighting are superb, and the recession of planes, beginning with the nearest arch, is a rare achievement in technique.

Data: May, 7.30 A.M.; Ica ($2\frac{3}{4} \times 3\frac{1}{4}$) camera; 12 c.m. Carl Zeiss lens; at F/12; 1/10 second; Premo Film Pack; Metol-Hydro; print, Cyko Buff.

No. 5, with its occidental flavor, excels in spacing. No doubt, what appears to be a summer-house, at the left, serves as the main pictorial feature; but the black, featureless tree at the extreme right—which one may assume to be the balancing object—catches the eye of the beholder first, and is a source of weakness in this striking composition.

Data: On one of the Thousand Islands in the St. Lawrence River; June, 11 A.M.; bright sun; 3A Special Kodak; stop, F/11; 1/50 second; Eastman roll-film; section of negative enl. on P. M. C. No. 5 Regular.

No. 6 reveals that artist in her well-known refined and charming individuality. The old, provincial residence is well placed in the landscape. It is guarded by two stately elms, which however, suffer slightly from contrast that is prejudicial to the quiet character of the scene.

Data: Westmoreland, N.H.; Oct., 10 A.M.; sunny; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex; $7\frac{1}{2}$ -inch Wollensak Verito; at F/11; color-screen K 3; Commercial Ortho Film; pyro; Defender Velours Buff Platinum Mat.

Photographing Children

In an interview granted to a *Daily News* representative, Mr. R. Speaight, the Bond Street Court photographer, gave some useful hints in the making of child-pictures. In his view the secret of the modern photographer's success with children is the realisation that the best way to photograph a child is in an absolutely natural position, and amid surroundings that appeal to the child-mind. Mr. Speaight himself believes so strongly in the influence of surroundings on the child, that he has had a miniature garden built in his children's studio, with a real grass-lawn, real flowers waiting to be picked, and a couple of live parakeets. He has found the garden a great success with his child-clients, who soon forget that they are in a studio.—*British Journal*.



ON THE GROUNDGLASS

WILFRED A. FRENCH



"Ponder Your End!"

UNDER this caption the *Photographische Industrie*, the best weekly publication devoted to the interests of the German photographic industry—and in an effort to increase its circulation—prints the sad experience of a certain photo-dealer which, translated, reads as follows:

A certain photo-dealer was hunting in a forest, when he was suddenly overtaken by a severe thunder-shower, which obliged him to seek shelter. He looked for one in vain, until at last he discovered a hollow tree-trunk into which he squeezed himself and found temporary protection. In the meantime, the shower turned into a cloudburst which lasted several hours and also penetrated the tree-trunk which, on account of the extreme wetness, contracted. When at last the rain subsided and the photo-dealer wanted to leave his refuge, he found that the entrance had become so narrow that he could not get out. He tried hard and long to release himself from his enforced imprisonment; but had to acknowledge his efforts as fruitless. At last, he saw that he must die miserably in this hollow tree. Here, in his last moments, he reviewed the events of his life and especially everything that he had omitted and neglected to do. Among other things, he remembered that he had not subscribed to *Photographische Industrie*. The knowledge of this omission and of his guilt pressed upon him so hard and he felt so small, that he was able to force himself with ease out of the narrow hole and this saved his life.

May this also be a lesson to forgetful readers of PHOTO-ERA MAGAZINE.

The Old and the New

I DROPPED in at the Union Camera Club, Boston, one evening, last October, and found several members gathered around an elderly gentleman who was the guest of a member. He was showing a number of large albums filled with photographs he had made forty or more years ago when he had helped to form the first camera club in Boston. It was called, "The Boston Society of Amateur Photographers", and W. H. Pickering, the eminent astronomer—who has recently discovered atmosphere and insect-life on the Moon—was president. The old-time camerist had just come from Jamaica and, later, allowed us to see some rare photographs Professor Pickering had made to prove his theory that the moon was not without some form of life.

We were all supremely interested in our visitor's large collection of pictures made in the early days, which he compared with work done by him during the past five years. How great the contrast! He did not hesitate to point out to the younger members what he used to do, and what he now sedulously avoids doing.

He may write an article for P. E. some day. I suggested that he call it, "Retrospection". Pictures which gained him prizes in New York, Philadelphia, Boston, and even in Europe, showed that they were marked by almost microscopic definition, i.e., visible with the aid of a magnifying-glass; for, viewed with the naked eye, they looked *beautifully soft*. There was

no disagreeable sharpness, and yet one noticed a wonderful stereoscopic effect, or sense of distance from the foreground to the extreme distance. It acted as a sort of revelation to those who examined these prints, which had been made by a professional on albumenised paper—a printing-medium that was the vogue during the seventies and eighties. Asked what lens he used, he replied—and this is another one of those rare coincidences of which I gave several instances in the October issue—that it was a No. 2 Voigtländer Wide Angle Euryscope, the counterpart of which I used, occasionally, during the eighties and nineties. (I still have this remarkable lens and may be willing to lend it to a responsible member who cares to experiment with it.) This circumstance brought up the question, "Were these old-time lenses superior to the present day highly corrected anastigmats; and did such lenses as the Voigtländer Euryscope and Darlot's later Anastigmat (placed on the market about 1900) possess any optical excellences that are absent in the present-day camera-lenses? Of course, much really depends upon the way these latest lenses are used, and whether the qualities which distinguish such a superb optical achievement as the Carl Zeiss Tessar are fully brought out by the user. These and similar questions were asked, but only partly answered on that evening. They would seem to offer much food for thought and discussion.

"A Rose by any other Name"

HERE is a New York photo-dealer who reads PHOTO-ERA carefully. He writes to say that he was glad to learn from the September number the origin of the word "Ciné". He sold several Ciné-Kodaks, before Christmas, one customer calling for a "Sinnee" Kodak, and another for a "Seenay" Kodak. Desiring to "get things right," he telephoned to the Eastman headquarters and learned that the latter was the correct pronunciation. "I don't care what name they give to outfits and supplies, so long as I understand what they want," he added, "but while I sell a great many Agfa specialties, people will insist on calling them 'Afga.' I suppose they think it has something to do with afghan! Perhaps your people can explain the meaning of Afga; several have asked me." [According to an advertisement in *Photographische Industrie*, the trade-name Agfa is derived from the initials of the manufacturers' name—Actien-Gesellschaft Für Anilin Fabrikation. (Stock-Company for Anilin-Manufacture.)]

Too Much to Expect

"Look here," said the head of a certain photo-firm, addressing the new stenographer, "this letter is all wrong. Your punctuation is very bad and your spelling is worse. I can't afford to send out any such stuff to my clients."

"Well," she replied, "I'm sorry if my work don't suit you, but was you expectin' to get a Mrs. Noah H. Webster for ten dollars a week?"—Contributed.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Distance from Frame to Printing-Light

THE length of time it takes to make a print by artificial light depends on the density of the negative, the sensitiveness of the paper, the actinic brilliancy of the light and the strength of the light at the point where the printing-frame is placed.

The density of the negative, the sensitiveness of the paper and the actinic brilliancy of any particular light are fixed quantities, but the strength of the light that reaches the printing-frame can easily be changed because it depends on the distance that the printing-frame is placed from the light.

The closer the frame is to the light the quicker the printing, but if the frame is placed too close to the light the negative will not be uniformly illuminated; some parts will be more strongly lighted than other parts, and, as a result, the print will not be uniformly printed.

The way to obtain a uniform illumination, which will ensure the same strength of light reaching all parts of the negative, is to always place the printing-frame not less than the length of the diagonal of the negative from the light.

The diagonals of the various sizes of negatives that are made in modern hand cameras are:

| | |
|------------------------------------|-----------------------|
| $1\frac{5}{8} \times 2\frac{1}{2}$ | 3 inches |
| $2\frac{1}{4} \times 2\frac{1}{4}$ | $3\frac{1}{4}$ inches |
| $2\frac{1}{4} \times 3\frac{1}{4}$ | 4 inches |
| $2\frac{1}{2} \times 4\frac{1}{4}$ | $4\frac{7}{8}$ inches |
| $2\frac{3}{8} \times 4\frac{7}{8}$ | $5\frac{5}{8}$ inches |
| $3\frac{1}{4} \times 4\frac{1}{4}$ | $5\frac{3}{8}$ inches |
| $3\frac{1}{4} \times 5\frac{1}{2}$ | $6\frac{3}{8}$ inches |
| 4 x 5 | $6\frac{3}{8}$ inches |

Kodakery.

Safranin-Coloring

THE safranin-coloring that remains in small quantity in the negatives when the former has been used as desensitiser does not interfere with printing from the plates, even when the coloring is strong and uneven, says A. Odenkrantz in *Das Atelier*; hence it is not necessary to decolor the negative before printing.

Eliminating Grain on Negatives

WHETHER films or plates are used, one sometimes gets a pronounced "grain" on negatives. This accident is disastrous, not only for direct printing but particularly for enlargements. The principal causes are: 1, a chemical or a lantern-fog in the course of development; 2, a too warm developer or one containing too much sulphite; 3, a too warm or exhausted fixing-bath, or one without hardening material; 4, too lengthy washing. The remedies are all indicated: it is simply a matter of avoiding the causes named. For enlarging we recommend always interposing a ground-glass between the source of light and the condenser: by this means the slight grain that may exist on the negative is completely suppressed and also the inevitable small

defects on the gelatine such as scratches, erosions, dust, etc. Another precaution, if considered useful, is to clean the negatives lightly with turpentine before enlarging. In any case there is no question that an enlargement on glass or film is much better, softer and finer when a diffusing-screen (ground-glass) is interposed between the light and the negative.

Photographie Moderne.

Expelling Hypo with Salt-Solutions

MANY practical photographers have for a long time employed solutions of common salt to remove quickly the fixing-soda from prints. The *Bulletin de la Société Française* published recently some experiments made by M. Charriou with sodium and ammonium bicarbonate. After a single treatment of fifteen minutes in a 5 per cent. bicarbonate bath, the prints, which hold the hypo tenaciously, contained only 9/10,000 of hypo; after repeating the bath four times, only a slight trace was found. The elimination of hyposulphite from prints seems to be much helped by immersing in a 5 per cent. bath of sodium or ammonium bicarbonate.

A Method to Enlarge Negatives

IN these days of photographs made with diminutive vest-pocket cameras it can readily be understood that the amateur will not be satisfied with a print from his tiny negative, but that he will endeavor to make the most he can of it. Thanks to the large number of enlarging-apparatuses—cones, lanterns, etc.—it is almost as easy to make an enlargement as a direct print. Many amateurs, however, prefer to make their enlargements from a negative that will permit of printing several copies by contact, but are discouraged by the difficulties and the cost of large negatives. The mere idea of having to make a diapositive and enlarge it afterwards on a plate is enough to halt him. The following plan, however, will enable anyone who wants to make a suitable enlargement at small cost and with a minimum of difficulty, to make a negative on paper which will give excellent prints on any kind of photographic paper—even platinum, gum or carbon.

An enlargement is made in the usual way on mat-bromide paper—the finest and smoothest possible. From this it is only necessary to make a print on negative-paper, or on a printing-out paper of fine grain on which the printing can be watched. If it is necessary to preserve the enlargement it may be used as it is, but the printing will be very slow; if, however, it is made transparent by applying white wax to the back or varnishing with a solution of Canada balsam (10 parts in 40 parts turpentine) printing will be much quicker. If desired, the negative may be toned; but simple fixing is sufficient. The printing should be pushed 'till bronzing appears in the shadows, then wash and fix in water 1 litre, hypo 75 grammes, sodium metabisulphite 30 grammes. The two latter should be dissolved separately before mixing and the bath prepared at least twelve hours before using. If necessary the enlarged positive may be retouched before making the large negative by contact, but in this case it will be necessary to use only an opaque paper.

Photographie Moderne.



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY



A Word from the Department-Editor

FOLLOWING what has been, I am sure, the merriest Christmas you have ever known, the greetings of the New Year are in order. Beginning with the New Year, we will share in a new department of PHOTO-ERA MAGAZINE. I am sure that all of you, who are interested in motion photography will join with me in extending our sincere thanks to Mr. Beardsley for this innovation. As such a department is new, it must be to a certain extent an experiment. In view of this fact, I am going to ask you to meet me half way in this work and we will show our Editor that our thanks are not mere empty words.

Motion-photography is a highly developed branch of photographic science. Hence the amateur cannot grow up with the science as he did with still-photography. It is ready made and the amateur finds himself in a position analogous to that occupied by a third-grade student dropped into the eighth grade at school. He has a whole lot to learn. On the other hand, many of the professional kinematographers have but hazy ideas of the basic laws of art and of photography. They work by rule of thumb. They have learned exposure by long practice, and the commercial laboratory does the laboratory-work. At present the amateur and the professional represent the two divided halves of the ideal motion-photographic fraternity.

By consistent teamwork we can make of this department a common ground where the two halves can meet and unite. Who can tell the great developments which may eventually spring from this beginning? But all things must start before they can grow. Our problem is to get started. Does it not seem logical that a part of this department should be given to the answers to questions about the work? Would you like to see short reviews of some of the remarkable uses to which motion photography has been adapted? I am going to ask you to send in your questions, to suggest topics for discussion and to report any unique use of motion photography which comes to your notice. Those suggestions which appear to be in the greatest demand will receive the first consideration, and questions will be answered in rotation.

It has been my observation that amateur photographers are good sportsmen, and I know that you will all agree that this department shall, to the best of its ability, serve the greatest need of the greatest number. If such a course shall serve to bring out new points, friendly discussions may be continued through several issues; but of course, anything approaching bitterness or personalities will not be printed. It is hardly necessary to mention this.

It is not intended that this department shall serve as a means of direct instruction. That will be the function of articles appearing from time to time in the regular pages of PHOTO-ERA MAGAZINE. Rather, this is your department for question and discussion. A one-man department soon becomes tinctured by that man's personal opinion, and no matter how good nor how bad those opinions may be, such will inevitably find both adherents and opponents. For this reason I hope that my rôle will soon become that of referee,

and the active material will come from you. This will give us a real, live organisation. Personally, I am looking forward eagerly to those helpful hints and suggestions which I am sure will be forthcoming.

Quartz Condensing-Lenses

ONE of the first new uses that has been made of clear-fused quartz, a recent development of the Thomson research-laboratory of the General Electric Company, is the commercial production of condensing-lenses for motion-picture apparatus. The exclusive sale and distribution of these lenses has been given to the Nicholas Power Company, 90 Gold Street, New York.

Though the superior qualities of clear-fused quartz were well recognised, its use for many purposes was formerly impossible because of manufacturing-difficulties. It has unique qualities which especially recommend it for condensing-lenses; it is not affected by the intense heat encountered due to the proximity of the lenses to the light-source, nor by sudden cooling.

Glass-lenses are subject to constant crackage and breakage, whereas clear-fused quartz, having a very low coefficient of expansion, can be heated to redness and quenched in water without cracking. Glass, if heated to a far less degree, is shattered.

Fused-quartz lenses $4\frac{1}{2}$ inches in diameter have been very successfully operated in motion-picture projection-machines, using currents as high as 150-amperes, and where glass-lenses cracked almost daily. They are also remarkably free of pitting-deposits which result from hot particles thrown while molten from the carbon.

Business in Kinematography

PUTTING aside the business of the producer of drama-films for the theaters, we learn that there is a rapidly-growing interest in the use of the kinematograph for more useful and profitable purposes in industry, manufacture and commerce. It would seem that this interest has in large measure been created by the introduction of film and apparatus of sub-standard size by the Kodak Company, but at present it cannot be said that the demand for such films is exclusively confined to film of the smaller size, although the very great advantage of non-inflammability which is assured by the Kodak Company by the adoption of acetone-cellulose film is an important factor. What we should like to emphasise is that the demand for motion-pictures is one which actually exists among large manufacturers and controllers of great numbers of work-people, and it is to be hoped that photographers in touch with such users will not neglect to seek business which belongs more appropriately to them than to anybody else. Initial outlay is certainly considerable, though not unduly so relatively to the prices to be obtained for doing work of this kind. And in addition to the industrial side there is the home-entertainment aspect of the kinematograph which for some years past has been cared for, for example, by Messrs. Butcher, with, however, comparatively small results, owing to the apathy of those best situated to profit from it. *The British Journal.*



THE STEREOPHOTOGRAPHER



Let This be the Exception

FOR a number of months many readers have written to the Publisher to ask him to begin a department devoted to stereophotography. Here it is! Let us hope that our good friends will not be like the poor young man who begged earnestly for some one to send him to college; but who, when confronted with the hard work it demanded, lost his eagerness. Let us make this department an exception. May it grow slowly and steadily through the combined efforts of lovers of stereophotography, and PHOTO-ERA MAGAZINE. Let us have letters, bits of news, short practical items and longer illustrated articles which will prove of practical value and interest to the stereophotographer. We can make this new department what it ought to be, provided we all get behind it, *and do it now.*

A Bit of Stereo-History

In looking over one of the recent catalogs which was issued by Jules Richard, we found the following lines which are of interest—especially to the reader who may ask the why of this new department.

"Nature as seen by the eye has three dimensions—length, breadth and depth. Therefore an ordinary photographic print, however perfect from a technical point of view, must fall short of the ideal, as it reduces nature to two dimensions and eliminates the element of distance. Stereoscopic photography was introduced to overcome this shortcoming. Its aim was to provide the photographer with the means of reproducing nature faithfully in its three dimensions. It restored the element of distance, and preserved the natural perspective and relief.

"Yet stereoscopic photography failed to win universal popularity. On the contrary, in its early days, it earned for itself an unenviable reputation, and was regarded with disfavor, amounting almost to prejudice, by large numbers of photographers.

"We can imagine some readers, when they discover that this article deals with stereoscopic work, being tempted to put it aside with a sense of disappointment. We ask, however, that they will read on, preserving an open mind. What we have to say on the subject will, we feel sure, prove interesting, and we hope to point the way to new sources of pleasure in photography, to discover for the reader added and more permanent interest in his hobby.

"The reason for the unpopularity of stereoscopic work was well founded. The apparatus required was bulky, intricate and delicate. The technical processes were both difficult and tedious. Success demanded patience, leisure and application. The practice of stereoscopic photography was, therefore, confined to a minority of painstaking enthusiasts to whom time and trouble were but secondary considerations.

"In spite of these disadvantages, stereoscopic photography did not die. It continued to live for one all-sufficient reason, the results obtained by its devotees were nearer to nature than ordinary photographic prints. Putting aside the difficulties, there was no gainsaying the fact that stereoscopic pictures were more natural, more living, than prints on a flat surface."

A Letter from a Stereophotographer

Publisher PHOTO-ERA MAGAZINE:

WITH reference to the proposed Stereoscopic Department. It is rather late to be writing on the subject, but the last issue of PHOTO-ERA MAGAZINE that I have had time to read was the September number and there you were asking for expressions on the subject.

Stereoscopic photography appeals to me because it is possible to show more in that kind of a print than by any other way. Combined with color-photography, the realism thereby obtained far exceeds that of motion-pictures. To many that may be, to a certain extent, objectionable, as 99% of stereo-prints are absolutely straight prints, or slides. Of course, great liberties may be taken with perspective by the use of lenses of various focal lengths, and by varying the separation of the lenses. Stereo-photography is not touched by the industrial photographer, although it should be very valuable in everything from botany to locomotive designing.

Many amateurs who are satisfactorily equipped with single-lens cameras do not care to—or, like myself, cannot afford to—invest in a good stereo-camera. However, for stills, a single-lens camera does just as well by making two exposures. If it is preferable not to bother with a sliding-top for the tripod, the whole tripod—assuming that a tripod is being used—may be moved, but in setting up for the second exposure, the most important part of the subject should occupy approximately the same place on the ground-glass that it did in the first exposure. For that purpose, I have a dot of ink on the center of my ground-glass. Of course, that won't do where there is any motion, and in that case I use a pair of Box Brownies. A hole has been drilled in the shutter-levers and threads fastened to them. To make the exposure, the two cameras—strapped together—are held with one hand and the other holds the two threads. An even tension is held on the threads, and by pulling on them, the two shutters are tripped simultaneously. Rather "primitive", of course, but it does the work in most cases. After each exposure, turn film on *both* camera—that requires practice—and turn the cameras over so that you always pull up on the threads. (Brownie shutters work both ways, if you've forgotten). This alternates the "rights" and "lefts" on each roll of film, but it is easy to tell which is which with a stereoscope. From the foregoing, it is apparent that the two lenses need only to be approximately matched.

From the laboratory standpoint, the process should particularly appeal to those having little time to devote to printing. All that is necessary is a good, fairly soft print, and a little care in mounting.

Well, I guess that is all that I have to say. Hope you decide that your readers are sufficiently interested in the subject to warrant the establishment of such a department. I believe interest would increase as you go along and I am sure that this department will prove to be a great success.

Very truly yours,
J. W. GROSIDIER.

SAN DIEGO, CALIF., November 13, 1924



LONDON LETTER

CARINE AND WILL CADBY



NEVER have our press-photographers had a more easy time than during our recent general elections. A lucky spell of weather, meaning a few fine intervals—for we have become very humble in our meteorological expectations—gave them a good chance; and every snapshot was valuable, whether it was of events or candidates, for the interest taken in election-affairs, this time, by the general public was quite extraordinary. The most apathetic citizens were turned into voters, and those who had never displayed any enthusiasm before, became propagandists on one side or the other.

The photographs are so good—thanks to the normal daylight which prevailed—that expressions on the faces of the speakers are clearly visible in the pictures. One very amusing print depicts Mr. Churchill addressing a crowded open-air meeting at Waltham Abbey. His face is alert with enthusiasm as he shouts, "Under which flag is the country to be governed?", while close alongside a devoted adherent—who performs the humble but useful task of holding up the loud speaker—has evidently become so absorbed in the effort of supporting the instrument, that his features have degenerated into a fixed martyr-like expression that is in humorous contrast to his chief, and would certainly attract no votes. Women and children bulk largely in the campaign, and a picture that represented the five smiling youngsters of the candidate in one constituency holding a poster emblazoned with the words, "Please vote for our Daddy", was no doubt aimed at the susceptible women-electors.

Thinking back on former elections, one realises how science is bringing us all into close touch. Here were we, in a village twenty miles from London, listening in and hearing all the results of the different polls as soon as they were declared; whereas, not so long ago, even London was dependent on telegrams. At present, sound has got ahead of sight; but no doubt, in the future, sight will catch up, and we shall see the actual events on a screen as they unfold, a magnifier taking the place of the loud speaker!

It is a good thing that Mr. J. Dudley Johnston is a man with a presence; for as the President of the Royal Photographic Society he will in future have to wear a badge of office and a gold chain! We can see him looking very dignified. Mr. T. H. B. Scott, F.R.P.S., has designed the badge which is a handsome piece of workmanship in gold and enamel, with the Society's initials, a crown and a wreath of laurels. This handsome regalia is the gift of an anonymous benefactor.

Not long ago, one of us was invited by a London professional photographer to a sitting for which no charge was to be made. We were to be presented with the finished proofs, and if further copies were required they should be paid for. At first, the reason given was that we were members of a certain London Club, most of whose members are engaged in artistic activities; but when we wrote saying we no longer belonged to it, the invitation was still extended.

This offering of free sittings in London is one of the weak spots of the photographic profession. It is the outcome of competition, but is not a healthy sign. The practice crept in at the time when so many of our leading amateurs took up professional portraiture. They wanted to get their work known and looked on

the society-beauty, or the distinguished somebody, as their best advertisement. No doubt, these free sittings helped to give them publicity, and often they sold further copies. Also the photographs were reproduced in the press where they interested a big public, a portion of which, let us hope, appreciated the original work. So the wind was sown, and it is this generation of professionals that is reaping the whirlwind. Nowadays, anyone with the smallest pretensions to fame or beauty, expects to be photographed gratis, and instead of being glad to order further copies to compensate the photographer, the sitter goes to another studio and gets a fresh set. It is wrong all around; for apart from unsound business, a bad side of human nature is encouraged which can put its pride in its pocket over the matter of getting something for nothing. One wishes the assertion that this weakness is mostly confined to the frailer sex could truthfully be denied. We were glad to hear that this subject is coming before the next Council meeting of the Professional Photographers' Association. We are confident it will be dealt with there as it deserves, for we possess no more public-spirited, active and shrewd body of men.

Explorers Film Ltd. propose to show the new Mount Everest film in London at the beginning of December. It has already been seen in India where it was praised. We have been specially interested in this venture, as a near neighbor was responsible for both the idea and the financing of the scheme, and he has always shown an interest in, and sympathy with, photography. The earlier film had been so disappointing with its "padding", and the subject is so enthralling, that one longs to see it adequately rendered.

Dr. P. H. Emerson—author of "English Idyls", which has just been republished, and a keen photographer of many years' standing—is engaged in writing a voluminous history of Pictorial Photography. Late in the last century he published a book called, "Naturalistic Photography", and his photographic work and teaching were no doubt responsible for a good deal of the progress on pictorial lines of that date. We have in our collection of photographs by well-known men and women—which forms a permanent little show hung in one room—two examples of Dr. Emerson's work that date back at least thirty years; and yet there is not a suspicion of their being old-fashioned or out of date. One has a big figure of a poacher with his dog on the marshes, and the other shows two boys walking by a stream. Both photographs have fine quality and are excellently composed. This, we think, is at least one searching test of old photographs. Many, no doubt, retain their place in our affections because they are links with the past, and we smile tolerantly on their shortcomings when compared with modern work. But to find landscapes executed thirty years ago and retaining their aesthetic interest without any special pleading, and produced by a medium which, since their date, has developed so enormously, demonstrates their value.

The Armistice Observances were celebrated yesterday (Eleventh November). We were motoring to a center to join in the two minutes' silence that was observed at 11 A.M. all over the country. Our car—as is its way occasionally—decided to pre-date the silence,

and stopped dead at 10.30. Two young mechanics who were passing, good naturedly volunteered assistance, and the complicated interior of the magneto was still in their hands, one of us holding odd screws etc: when 11 o'clock struck. The other remarked that it was time to observe silence. There all four of us stood, rigid figures, our work arrested and our attention fixed on something bigger and higher than getting the car to start. Not a vehicle passed; there was real silence all around. Later, when we got the engine going, we remarked what a strange group we must have appeared to an observer who did not know the cause of our stillness, and we were only glad that at such a moment no camera would lurk in ambush to record our plight.

But, as the papers show this morning, cameras were very busy during the two minutes' silence at big centers; for there are pictures of the scene at the Cenotaph in Whitehall, the Royal Exchange, at Cambridge, and elsewhere. But no photographer seems to have had the originality to attempt a representation of a normal street with its arrested animation. Such a scene should be easy; for it would be essentially a still-life subject and in no way relying on movement for conviction. And after all, the momentarily arrested everyday life of the ordinary street, that reflects the wonderful unanimity of the populace in this observance, carries far greater conviction of the reality of the underlying sentiment than any prearranged ceremony, however imposing.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

PHOTOGRAPHY AND ITS MYSTERIES, by C. R. Gibson, F.R.S.E. 251 pages, 30 illustrations and index. Price, cloth, \$2.50 Philadelphia: J. B. Lippincott Company.

The increasing interest in photography which is being manifested by young people from grammar-school to high-school age will meet a stimulus in this latest book by Charles R. Gibson. This new volume is part of the "Science for Children Series" which now comprises seven books. There is nothing technical about "Photography and Its Mysteries", yet it explains how photography was discovered, its many uses, its curious and interesting results, and how they are obtained—all told in plain and easily understood language. The book is primarily addressed to boys and girls; but there is much in it to interest and instruct the mature reader. We venture to say that many of the simple explanations made will serve to make clear a number of things which even advanced amateurs have passed over without really understanding.

A glance at the chapter-headings will give the general scope of the book. The First Cameras; The First Photographs; Photography Was Invented in England; A French Invention; Motion-Pictures; How Pictures

Are Made in Books; Photography Aids the Police; Photographing Through a Microscope; Making Photographs Underground; How We Telegraph Photographs; The Eye is a Camera; Photographing the Sun, Moon and the Stars; Some Curious Things About Photography, and Photography is a Wonderful Thing. We believe that this book will interest and hold the attention of the average boy or girl; and, hence, we think that it would make an excellent gift-book to accompany the presentation of a camera. The printing is large, clear and the book is attractively bound in a red and green decorated cover with pictures. We can state that this volume is fully up to Lippincott standards and that it is a splendid addition to photographic literature for the younger generation of photographers.

THE APPRECIATION OF ART. By Eugen Neuhaus. 250 pages; 68 illustrations and index. Price, cloth, \$3.00. Boston: Ginn and Company.

The increasing need of a thorough grounding in the fundamental principles which underlie the theory and practice of art, as related to pictorial photography, has been met by Professor Neuhaus in this new book. Perhaps, more than the painter or the sculptor does the aesthetic appreciation of art help the pictorial photographer. However, the practical side of the question is not neglected. Professor Neuhaus discusses at some length the social and economic forces that influence the currents of art, as well as cotemporary and earlier art-movements which interest the layman.

Among the chapters may be found a number of subjects which are of interest and value to the pictorial photographer. We mention the following: Nature and Art-Imitation or Interpretation; Idealism versus Realism; The Fantastic, the Grotesque; Caricature; Order, Composition, Design; Symmetry; Balance; Harmony-Unity; Technical Methods and Qualities; The Nude in Greek and Modern Art; The Economic Side of Art—Art Patronage and The Place of Art in Education. Professor Neuhaus has an easy, flowing style which makes the book a pleasure to read and which serves to expand the vocabulary of the reader. Moreover, there is a beauty and charm about the manner of treatment which opens a new field of thought to the average reader. We believe that the pictorial photographer will obtain practical instruction and true inspiration from a careful reading of this truly exceptional volume.

ABRIDGED SCIENTIFIC PUBLICATIONS, from the Research Laboratory, Eastman Kodak Company. Volume VII. 139 pages. Price, paper, \$2.00. Rochester: Eastman Kodak Company.

This seventh volume of a series of Abridged Scientific Publications is a collection of the papers published during the year 1923 by the Research Laboratory of the Eastman Kodak Company. Most of the papers are of a highly technical character and will require the training of a technician to read them with greatest profit. However, here and there, we find interesting material which can be understood by the average advanced or professional photographer. One paper, "Motion-Picture Photography for the Amateur" by C. E. K. Mees is interesting reading for the layman and shows clearly the progress that has been made to popularise motion-pictures for the amateur. For those who are qualified, this collection of scientific papers should be of much practical value and it will form an excellent book of photographic reference.



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL—ORC.



Future Photo-Scouting in U.S. Army

SOMETIME ago I sent Captain Beardsley an article on my ideas as to Photo-Mapping, for the service; and from the reply, I must have told the truth about conditions as they are. I have found that as a reservist, I am bound to reserve a lot of the truth, for the present, at least. Since that time Captain Beardsley has asked me if I would write a short article for his department—here goes.

What would you do if you were in command of a defensive force in our New England hills, and you had come here from some other section?

First,—you would call for all available maps, pictures, reports of enemy movements, etc., all of which you would find far from satisfactory, especially the maps. These would fail to give anywhere near the information you would need to visualise the terrain you must defend.

Now comes the call for scouts and mapping-parties and personal reconnaissance. About this time you would call on the Air Service for their photographs, and, if the weather were good, you would receive much valuable information, and a very complete set of photo-maps of the whole countryside, as the air service works fast and covers much area. All fine so far; but let me bring to you a new factor in planning the defense or offense in future combats. The Photo-Scout or Sergeant Photographer of Brigade Headquarters—not at present on the army rolls, but sure to come—reports to you with his small reflex camera, no larger than a small cigar-box, with its sharp-cutting high-speed adjustable telephoto-lens, and its magazines of extra-fast film. You take down your map of a certain sector and putting pencil on a certain "X and Y", coefficient, you will say "Sergeant you have two hours to scout and report one hundred and fifty yards each way of this point; don't miss anything. Let your assistant cover this thirty minutes later so that there can be no failures."

Let us follow the Sergeant. With a salute, he swings quickly out of the room, a motor-cycle rushes him to a point as near the out-posts as possible. From this point it is a regular scouting, except for the swish of a high-speed shutter. He spots the machine-gun nests, a concealed seventy-seven, a stokes, then the side-hill with its ravines, the old quarry, a natural earth-work, etc. Fifty times that shutter flashes its report, fifty times the Sergeant writes a note on the tally-pad. Once a machine-gun snarls out its tat-tat-tat. I see a Photo-Sergeant twist in pain, then crawl painfully back to where his assistant waits to check his movements. Twenty minutes later a Corporal of the Photo-Scouts reports with the Sergeant's film-magazine.

The scout has been out one hour and fifty-four minutes. The field darkroom is at your headquarters. It takes three minutes to place the exposed films in the hangers, they hang sixty seconds in one-minute developer, five seconds in the wash, five minutes in the fixer, and five minutes in a special hardener, then they are baked dry in a special gas-oven. It takes just twenty minutes for the Sergeant's report to go into the portable enlarger, where the laboratory men of the

scouts are turning out 8 x 10 pictures of the terrain into which you must send your men. And before your scout has been evacuated from the first-aid station, his reports are in the hands of every Company Officer in that sector. Every other sector on your front has reported in the same manner. And you have started reports back to the Commander-in-Chief, so he may know just what you are facing. In other words, the Air Service has mapped the great whole, but your scouts have given both you and your Commander-in-Chief a good report of the terrain over which tomorrow's action must come. Isn't it worth the cost?

Suggested by Lester E. Higgins,
Tech. Sergt. Q. M. C. 97th Div.

Engineer Officer Approves Vest-Pocket Camera

MY DEAR CAPTAIN BEARDSLEY:

Your letter of November 7 received. It will give me much pleasure to comply with your request to give my reason as to why the vest-pocket camera with a high-grade lens is the camera to use while on a tour of duty.

During a two-weeks sojourn at Camp Devens, Mass. I had with me a postcard-size camera which I found to be rather bulky; but I congratulated myself that I did not bring my Graflex. For instance, during a course in reconnaissance, covering a number of miles over dusty roads and carrying papers, maps, etc., besides a camera, I found that on reaching the destination, more often than not, my enthusiasm and desire for pictures had somewhat cooled. For this reason there were times when I left the camera in my trunk.

With opportunities on every hand for good pictures, it seemed a pity that I did not have the foresight to equip myself with a vest-pocket camera. In fact, when I returned to my home I lost no time in obtaining a camera of this type, which, should I be fortunate enough to attend camp next summer, will be my constant companion.

In making the photographs which you have already received, I lost several for the reason that the concussion caused me unintentionally to release the shutter, consequently the result was a blurred picture. From these experiences I have found that if the shutter is released immediately after the explosion, while the debris is still in the air, the result will be a fairly good picture. But should one have a camera which had a speed of about a three hundredth part of a second, with the proper lens-opening and ideal lighting-conditions a good clear picture can be obtained.

In conclusion I will say that a high-grade vest-pocket camera would be an important item in an officer's equipment. For in time of peace a photographic record can be had of most of the problems that may arise in training. Looking forward to the pleasure of meeting you personally in camp next summer, I remain

Sincerely Yours

Lieut. ROBERT A. CECCHINI, Eng's. O. R. C.
413th Engineers, XI Corps.

SPRINGFIELD, MASS.



ANSWERS TO QUERIES



Subscribers and regular readers wishing information upon any point in connection with their photographic work are invited to make use of this department. If a personal reply is desired, enclose a self-addressed, stamped envelope.

H. A. D.—For home-portraiture use a lens that gives a soft and plastic effect, and relieves the figure against the background and surroundings. Rectilinears and Anastigmats, even when used at full opening, may not always answer this purpose. The old-type of portrait-lenses (Petzval system), discarded by many workers because of their weight and bulk, will yield the above-mentioned effects together with a beautiful atmospheric quality. For 5 x 7 plate, try a $\frac{1}{2}$ or $\frac{2}{3}$ size Darlot Portrait-Lens, fitted with central stops (Waterhouse diaphragms), which, on account of its large working-aperture, has great speed. It will require some practice to discover the special merits of this type of lens. You can pick one up cheaply, by sending to Willoughby, Abe Cohen's Exchange, or N. Y. Camera Exchange for their latest bargain-lists. At the same time, procure an old-style portrait-camera and a cheap collapsible camera-stand, and you will have an admirable and inexpensive portrait-equipment.

D. C. G.—The softness of definition you so much admire is due partly to the slightly rough surface of the original prints and partly to the use of a soft-focus lens in producing the negatives of others. The best of the present available soft-focus lenses are made by Pinkham & Smith Co., Wollensak Optical Co., Hanovia Lens Laboratories, Bausch & Lomb Optical Company and others. One or two sheets of transparent celluloid, placed between the negative and the printing-paper, also produces an agreeable degree of diffusion in the resulting print.

S. L. N.—Platinum is a precious mineral found chiefly in the Ural Mountains, Russia, but for several reasons it is difficult to obtain. Deposits of platinum have been discovered in America and in Mexico, but not to any great extent. This fact has much to do with the greater cost of platinum paper.

W. M.—Your question seems to imply the belief that the lens-stop should vary with the condition of light. This is the case with small, inexpensive cameras; but it is not the ideal condition, for it gives no opportunity to make a distinction between detail and definition, the former being something that is exposed for and the latter something that is stopped down for. In the highest form of photographic work the stop is put in the lens quite irrespective of the exposure; its purpose is to regulate depth of focus, separation of planes, and the degree of definition. Correct exposure according to the condition of light is preferably regulated by the shutter-speed.

B. D.—The F-numbers of lenses such as F/7.5 and F/6.3, indicate the working-aperture of the lens at which good definition may be had, and hence the speed of the lens. The numbers themselves indicate the quotient resulting from division of the focal length by the diameter of the largest diaphragm-opening. Thus, F/7.5 means that the diameter of the diaphragm-opening is contained in the focal length 7.5 times; also it may be seen that the smaller the number the larger the relative working-aperture and the shorter the necessary exposure. A higher degree of correction is required for rapid than for slow lenses.



THE PICTURE-MARKET



There is a market for every good photograph. The amateur and the professional photographer have the opportunity to sell good pictures and to derive financial benefits from their camera-work. To make this department accurate and reliable we have requested and obtained the hearty co-operation of the editors. We make no claim to publish a complete list of the markets each month: but the names of magazines that appear below we know to be reliable and in the market for photographs at the time of going to press. We have obtained our information direct from the editors themselves.

The Athletic and Outing World. T. C. O'Donnell, Editor. 71-73 West Broad Street, Columbus, Ohio. To be known as *Outing* beginning with January, 1925. The editor writes, "We are going to be interested, to some extent, in good photographs of outdoor subjects, especially of animals. We are going to be especially interested in good photographs when they are accompanied by good articles on outdoor-subjects, viz: hunting, hunting-dogs, fishing, camping, motor-camping, ice-boating, skate-sailing, etc." Before submitting photographs or illustrated articles it will be well to write to the editor for rates of payment and his requirements.

Illustrated Current News, 511 Chapel Street, New Haven, Conn. Milton Small, Art Editor. Uses photographs of national interest, such as large fires, wrecks, sporting events, etc. Size 5 x 10, glossy. About fifty words of descriptive matter should accompany prints. Pays \$3.00 per print on acceptance. "We are publishers of a pictorial service sold to merchants for window display. Pictures submitted should be on National interest."

Farm Mechanics, 1827 Prairie Avenue, Chicago, Ill. J. D. Eddy, Art Editor. Uses human interest photographs with a farm background, especially mechanical. As much descriptive matter as possible should accompany the pictures. Pays \$1.00 each, on acceptance.

Motorcycle and Bicycle, Illustrated, 239 West 39th St., New York City. W. H. Parsons, Art Editor. Uses Sporting and scenic pictures containing motorcycles and bicycles. Postcard size pictures desired, glossy. Two or three lines of description should accompany pictures. Write to the editor before sending pictures. Pays from 50 cents to \$1.00 each on the tenth of the month following publication. Action-pictures are preferred.

Country Life, Garden City, L.I., N.Y. Reginald T. Townsend, Art Editor. Uses photographs of outdoor living, sports, country estates, country house interiors. Any size, glossy prints. Pays from \$2.00 up, on acceptance.

American Builder, 1827 Prairie Avenue, Chicago, Ill. B. L. Johnson, Editor. Uses photographs of small to medium-sized homes of character and good design. Size 7 x 9 preferred, glossy. Wants the location of home and name and address of architect, if possible. Pays from \$1.00 to \$2.00 each print on acceptance.

American Bee Journal, Hamilton, Ill. Uses unusual photographs of bees or honey, or bee-forage. Size 4 x 5, glossy. Enough descriptive matter to disclose the unusual interest should accompany the pictures. Pays according to character of picture, \$2.00 to \$3.00 each, on acceptance.



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



Dr. Pardoe Awarded Medal by R. P. S.

We are very glad to make mention of the fact that Dr. J. B. Pardoe of Bound Brook, N. J., has been awarded a medal from the Royal Photographic Society of Great Britain. We believe that all our readers will join us in expressions of pleasure at this happy event. Dr. Pardoe has been working quietly and steadily for a number of years to perfect himself not only in nature-photography but in pictorial photography. His consistent efforts are now bringing their reward. We might add that his success is a splendid example of what any man or woman can accomplish who is willing and able to put the necessary time and effort into the mastery of photography.

The Frederick & Nelson Fifth Annual Salon

For the fifth season art-lovers of Seattle and the Pacific Northwest have enjoyed the Salon of Pictorial Photography held in the auditorium of Frederick & Nelson. This year's exhibition, beginning October 20 and closing November first, was acknowledged to be a decided triumph over all previous exhibitions of its character in Seattle. More than three hundred entries, representative of the best efforts of photographic artists not only in the United States and Canada, but Europe as well, were hung on the walls of the auditorium.

On the judging-committee for prizes and awards were Wayne Albee, one of Seattle's pictorial photographers, Ambrose Patterson of the Fine Arts Department of the University of Washington and John Vanderpant, pictorial photographer of New Westminster, B.C.

Among the foreign exhibits were genuine works of art from Belgium, Italy, Spain, Hungary, France, Austria, Scotland, England and Canada. Among the American exhibits, the states of New York, California and Washington were the best represented. One of the surprising features of this salon was the number of photographs made by Japanese artists living along the Pacific Coast. These Japanese prints were particularly beautiful with a fine appreciation of light and shadow, line and form. It was easy, however, to detect the artistic influence of the "Land of the Rising Sun", Japan predominating in most of these Japanese photographs.

For the first time in the history of Frederick & Nelson's Salon of Pictorial Photography, prizes and awards have gone to foreign countries which determines the fact that Seattle's yearly exhibition is no longer national but international.

Although the first prize was captured by Jose O. Echague of Madrid, Spain for the striking portrait of his countryman, "Castellano", the second and third prizes went to two of our nationally known pictorial artists, Louis Fleckenstein of Long Beach, California for his "Over the Unbroken Trail" and Clarence W. Tucker of Covina, California for his "In the Light of Wisdom".

"Over the Unbroken Trail" is an achievement in

the world of photography of which Louis Fleckenstein can well be proud. Every movement of the two galloping horsemen as they mount the barren hillside shows sincerity in every detail and possesses of all qualities, the "moving thrill" which true artists consider the final test in art. It is worthy of a Frederick Remington and represents the romantic West of yesterday.

Clarence W. Tucker's prize-winning picture called "In the Light of Wisdom" was one of the most original photographs at the Salon. The materials for such a picture can be found on the library table of the average American home, a striking combination of art close at hand and consequently overlooked.

Fifteen major prizes were awarded the following photographers:

"The Husbandman"; O. C. Reiter, Pittsburgh, Penn.
"The Ship Mechanics"; Walter P. Bruning, Cleveland, Ohio.

"Sulla Spiaggia II"; Carlo Baravalle, Torino, Italy.
"Portrait of Mrs. C. B. Falls"; G. W. Harting, New York City.

"Gateway Rocks, Garden of the Gods"; H. L. Standley, Colorado Springs, Colo.

"The River of Dreams"; Charles Bowen, Seattle, Wash.
"Gossamer Hall"; Roy B. Dill, Seattle, Wash.

"Desolate Isle"; William Gilchrist, St. Augustine, Fla.
"Fraud-cat"; Virna M. Haffer, Tacoma, Wash.

"California Hills"; Henry A. Hussey, San Francisco, Calif.

"Elegy"; H. Onishi, Seattle, Wash.

"Meditation"; William D. Rawling, San Francisco, Calif.

"A Frog, He Would A-Wooing Go"; Walter Rutherford, Swansea, Ont.

"Devante le Sillon"; Vicomte de Santeul, Paris, France.

"At the Baby Clinic"; Margaret Watkins, New York City.

In addition, the following ten artists received honorable mention at the hands of the judging-committee:

"Winter Sunshine, State Capitol Group"; James D. Basey, Olympia, Wash.

"Ethel"; Sigismund Blumann, San Francisco, Calif.

"Portrait of a Friend"; Ralph G. Cahn, San Francisco, Calif.

"Phantasy"; Howard Cloyes, Los Angeles, Calif.

"A Studio Character"; G. W. Harting, New York City.

"Cargo"; Dr. Arthur Nilson, New York City.

"Commercial Still Life"; Michael Shuter, New York City.

"Peace"; Mrs. Eleanor Smith, San Diego, Calif.

"Étude Bourgeois"; Margaret Watkins, New York City.

"Dethroned"; Myra Albert Wiggins, Toppenish, Wash.

Originality, pictorial composition and photographic quality constituted the basis on which the judges awarded the prizes.

After attending Seattle's Salon of Pictorial Photography this year one is impressed, first of all, with the idea of photographic progress, the seven-league strides that photography is making in the world of art. Not only are the pictures themselves showing definite progress in originality of design, sincerity of idea, freedom of expression and general technique; but the

lovers of art, themselves, are becoming more and more appreciative of the artistic achievements in the field of pictorial photography. They come in enthusiastic groups and linger lovingly among the pictures, admiring, studying composition, craftsmanship and values of light and shade, line and form and color and then go home with the feeling that they have, in some way or other, attended grand opera. Seattle's 1924 exhibition of pictorial photography brings home to the minds of the people something of the artistic quality of lens-work in the hands of men and women of understanding.

HARRIET GEITHMANN.

[We regret to appear to be late in reporting this splendid salon; but we must repeat that material for this department must be in our hands on or before the fifth of the preceding month to ensure publication. This review did not reach us until after the December issue was on the press. EDITOR.]

Fall Activities at the Brooklyn Institute

THE Department of Photography of the Brooklyn Institute of Arts and Sciences opened the season auspiciously, with excellent enrollment in the classes and an interesting one-man exhibition. The Department became affiliated with the Royal Photographic Society of London in September and feels proud of the honor.

Mr. Zerbe reports an excellent and enthusiastic enrollment in his classes in the Rudiments of Photography, with all students eager to make progress. The two classes held an outing the first Sunday in November, spending the day at Little Falls, N.Y. Mr. Zerbe's first two public Friday night demonstrations on "Gaslight Printing" and "The Kallitype Process" were well attended. These are open to the public and a schedule of those remaining will be sent upon inquiry to anyone caring to attend.

Miss Sophie Lauffer's class in Pictorial Photography has had some interesting sessions, including a talk on composition, demonstration of Gum-Printing by Dr. T. W. Kilmer, an outing to High Bridge, and a studio-session on Portraiture. At the next session of the class, every student is to make a bromoil print.

The studio-committee has been busy making improvements this fall, having built a large background and model-stand and installed two 1000-watt lamps.

A one-man show by Myers R. Jones of Brooklyn, opened the series of exhibitions to be held this winter. Mr. Jones showed fifty prints, most of which were hand-coated platinum of a lovely, warm tone, with a few examples of kallitype, gum, and bromoil. Mr. Jones displays versatility in his range of subjects. Among a group of scenes and bits of genre made abroad might be particularly noted, "Old Gate, Totnes, England", "Mending the Rug" and "A Portuguese Beggar". Several made along the Maine coast included "The Willows, Pront's Neck" and "On Saco Bay". "Thorn in the Foot" was a nice nude and among several charming portraits were one of "Maud G." a girl in old-fashioned dress with a big hat, and an unnamed picture of a young woman in evening-dress putting on her long white gloves. Mr. Jones' show is later to be hung in Cleveland and at the Art Centre in New York.

Miss Sophie L. Lauffer, the well-known pictorialist who is Secretary of the Department of Photography of the Brooklyn Institute, has been represented by five one-man exhibitions during the year 1924. Besides a show of her latest work at the Brooklyn Institute in February, exhibitions were hung at the Camera Clubs in Detroit, Syracuse and Cleveland, and in October at the Photographic Club of Baltimore.

Of Value to Flashlight-Photographers

PHOTOGRAPHERS who have occasion to make pictures of electrical apparatus will be interested in a recent experiment in high voltage at the Ft. Wayne Works of the General Electric Company. A report came to the engineers there that a direct short in a 13,000-volt circuit had been caused by a photographer's flashpowder, which was set off within the station. E. A. Wagner, managing engineer, set up a flashpowder under two wires carrying 13,000 volts. These wires were separated a distance sufficient to make the normal potential necessary to cause an arc-over at least 90,000 volts.

The flashpowder was set off about four feet below the wires. This caused an absolute short circuit between the wires, a distance of about nine inches. The short circuit at once tripped the main breakers in the plant. The hot gases and particles rising from the flash were ionized between the high-potential wires, causing the arc-over. Flashlight photographs around electrical apparatus should be placed where the rising powder or gases will not pass over or between high-voltage circuits.

Photo-Era Magazine in Korea

RECENTLY we received some pictures to be entered in our competition which bore the name of Margaret T. Parsons and the address "Taikoo", Post Box 13, Harbin, North China. Naturally, we were somewhat interested to know how this lady happened to send pictures to this competition from such a distance. Shortly after, we received a letter from her in which she explained that while traveling through Korea she came upon a copy of PHOTO-ERA MAGAZINE which, she was kind enough to say, proved to be most helpful. When she came to that part of the magazine which referred to the competitions, her interest was aroused and she determined to become one of the contributors. All of which shows that PHOTO-ERA MAGAZINE does travel in foreign countries.

Print-Exhibit of the Appalachian Mountain Club

THE second competition exhibition of photographs made by members of the Appalachian Mountain Club, was held at the club's rooms, No. 5 Joy Street, Boston, U. S. A. December 1 to 6. There were thirty-six exhibitors, each of whom was limited to six prints. The quality seemed nearly as high as that of the first exhibition which took place last spring. The three prizes (blue ribbons) were awarded as follows; first, to George H. Chapman, for "The Road's End", a beautiful, well-balanced landscape—a cottage in a pleasing setting of trees and clouds; second, to Henry O. Glidden, for "Through Nature's Window"—a distant mountain seen through nearby foliage; third, to Franklin F. Spaulding, for "Lake Josephine and Grinnel Glacier"—a magnificent enlarged print of the glacier faintly reflected in the waters below, being, perhaps, the most superb picture, pictorially and in tonal quality, in the entire exhibition. The first-prize winner also received a silver-cup, his name thereon being preceded by that of Dr. Ralph C. Larrabee, the first-prize winner at the club's first competitive exhibition, last spring. Five Honorable Mentions were awarded, to Eliot W. Remick, for fine view of a mountain almost hidden by light fleecy clouds; Miss Frances G. Dudley, for a delightful view of the river Indre; Prof. Walter C. O'Kane, for a foggy morning-

view in the woods; Howard L. Hillman, for a flower-study, delicate in tone and workmanship; Harold I. Orne for a fine picture of Squam Lighthouse, Cape Ann, and W. Frank Mattson, for a view of Mt. Robson, Canadian Rockies.

Other highly meritorious prints were by Katherine H. Andrew—views of Banff, Canada; Harriett S. Warren—landscapes and marines; Harold I. Orne—winter-scenes in the White Mountains; Allen H. Bent—marines and landscapes; Eugene Pettee—a delightful group of white birches; E. F. Scheibe—an artistic combination of mountain, evergreens and road; Arthur C. Sprague—a superb collection of views of Yosemite Valley; Dr. Ralph C. Larrabee—several delightfully handled landscapes, and Helen L. Jones—views in Au Sable Chasm, Adirondacks.

W. A. F.

Our Compliments to Agfa Products, Inc.

IN the recent C. G. Willoughby Photographic Contest held in New York City, the prize-winning print in Class A, by Rev. Ross R. Calvin, 121 West 91st Street, N.Y.C., was made on Agfa film. This entitled him to a \$50.00 award. The fact is that many pictures submitted in this contest were made on Agfa film. Others made on Agfa film might have won prizes had their makers been more careful with regard to photo-finish-ing and mounting the prints artistically. All of which should be encouraging to our good friend, George Barrows, sales manager, who has tried very earnestly to convince amateurs and professionals that his product is worthy of their confidence.

Census of Photographic Apparatus and Materials, 1923

THE Department of Commerce announces that, according to the data collected at the biennial census of manufactures, 1923, the establishments engaged primarily in the manufacture of photographic apparatus and materials reported products valued at \$71,828,028, an increase of 1.7 per cent. as compared with 1921, the last preceding census year. The principal products of the establishments covered by this classification are cameras, motion-picture cameras and projection-machines, photostat-apparatus, blue-printing machines, flashlight-apparatus, tripods, film-rewinders and reels, plateholders, developing-tanks, shutters, sensitised paper and cloth, sensitised cards and novelties, developing and other chemicals, dry-plates, films, photographic mounts and frames, flash-light-materials, lantern and stereopticon slides, sensitised ferrotype plates, and sheet gelatin.

Of the 111 establishments reporting for 1923, 36 were situated in New York, 15 in Illinois, 11 in Pennsylvania, 10 in Missouri, 9 in California, 6 in Massachusetts, 5 in Indiana, 4 each in Minnesota and Ohio, and the remaining 11 in 6 other States. In 1921 the industry was represented by 136 establishments, the decrease to 111 being the net result of the loss of 44 establishments which had been included for 1921 and the addition of 19 which were new to the industry. Of the 44 establishments lost to the industry, 15 had gone out of business, 15 reported products valued at less than \$5,000 (no data are tabulated at the biennial censuses for establishments with products under \$5,000 in value), 11 were idle during the entire year, and 3 had been engaged primarily in the manufacture of photographic apparatus and materials in 1921 but reported other commodities as their principal products for 1923 and were classified in the appropriate industries.

Attention—Photo-Pictorialists!

THE relatively low prices asked for pictorial photographs of genuine artistic merit displayed at American Salons, and at other exhibitions, as well as the meagre sale of such pictures, has proved disappointing to the exhibition-committees. This important subject is treated on this month's Editorial Page, yet only tentatively. It may be well to know the reason why the pictorial workers themselves put such a seemingly low valuation on their work, whether it is from altruistic motives—placing veritable works of art within the reach of impecunious picture-lovers—or lack of business-acumen. Of course, there are many artistic workers who desire to practise photography purely as amateurs; consequently, they do not sell their pictures, but occasionally give one to a friend, or to someone they wish to favor. As to professional or semi-professional workers, many base the sales-price of their pictures on what they think that the public will pay. Pictorial workers owe it to their reputation as creative artists, however, as well as to the dignity of pictorial photography as a fine art, to regard their productions as comparable to oil-paintings—at least the equal of watercolors and etchings—and to sell them at comparably high prices. The prices mentioned in connection with the Pittsburgh Salon are identical with those which prevailed at the last Salon of the P. P. of A., whose president, Mr. G. W. Harting, personally declares that some of the prices were altogether too low for fine artistic creations, and often no higher than the prices asked for commercial photographs.

We have hanging in our office a beautiful 8 x 10 print by A. L. Coburn, for which we paid him \$75, and one 6½ x 8½, \$50, bought in 1907! A well-known Boston photo-pictorialist sold an 11 x 14 bromoil at a New York show, last spring, for \$50. If tagged \$25, it might not have been sold. The buying public seems to have a higher regard for an article of merchandise or a work of art, the more it costs. Let the pictorial worker remember this.

We shall welcome a public and frank discussion of this important subject, and freely offer our pages to this end. Correspondents are politely requested to express their views in as few words as possible and send them to us without delay.

W. A. F.

Lieut. Stevens' Aerial Photographs

THE wonderful photographs made from an airplane by Lieut. Stevens, of the U.S. Air Service, which embellished the September and November issues of PHOTO-ERA MAGAZINE, have brought us letters of admiration from numerous enthusiastic readers, all of whom wanted to know what lens was used by the photographer. Although no data could be obtained regarding these remarkably successful aerial photographs, we ascertained that he used the (imported) Carl Zeiss F/4.5 Tessar Lenses.

Walter P. Bruning and His Baby-Pictures

WE have received a very neat folder with an attractive photograph inserted and a note attached which calls attention to the skill and ability of Mr. Walter P. Bruning of Cleveland, Ohio, who specialises in "home portraits of babies and small children". Our readers know of him through the many delightful pictures which he has entered in our competitions and which we have subsequently published. We take this opportunity to compliment Mr. Bruning on his original manner of soliciting business and to wish him the success he fully merits.

B. Y. M. C. Union Camera Club

THE December meeting of the Union Camera Club, Boston, U.S.A., will be long and pleasantly remembered by those who were fortunate to be present. The main entertainment was furnished by Franklin I. Jordan, a member, and a pictorialist who has figured prominently as a prize-winner in PHOTO-ERA monthly competitions.

After the business of the evening had been transacted, the members voted for the best three prints in the monthly pictorial competition which was the most successful one held in a long time. The vote was as follows, No. 1, an interior of uncommon merit, by John Borges; No. 2, a well-composed landscape of great beauty by Olav Ostby; No. 3, a striking and admirably composed winter-scene—a fishing-boat held fast in the ice, by Alton H. Blackinton.

Col. J. M. Andrews' illustrated talk on Autochromes could not be given because, up to almost the last moment, a 5 x 7 projection-lantern could not be procured. Here Mr. Jordan was pressed into service and, aided by about twenty groups of pictorial illustrations, displayed on the wall, proceeded to give as clear, helpful and interesting a talk on composition as could possibly be imagined. Although the speaker has long been esteemed as a pictorialist and technician of unusual ability, his comprehensive knowledge of the principles of pictorial composition was a delightful revelation to his fellow-members. At the close, Mr. Jordan was given an ovation, and individual thanks and congratulations from many members including the writer.

W. A. F.

American Pictorial Workers

READERS who are interested—and who is not?—in the forthcoming discussion about adequate prices for artistic pictorial photographs, referred to in this issue, will find excellent illustrations of the work of prominent American photo-pictorialists (Salon-exhibitors) in PHOTO-ERA, December, 1923.

The New Photographic Recruit

I'm thirteen years old. (It isn't good form to begin a composition with "I", but there is no other way to start.) On my birthday daddy gave me a vest-pocket kodak with an anastigmat lens that opens to F/6.9. The lens does the focusing by turning it, which is more convenient than his Graflex, but it isn't quite so impressive. I liked the leather carrying-case, too; but I've found since, that it has less to do with making good pictures than how you use the machine itself. Anyhow, the tan leather pleases my vanity, and a girl's vanity requires some consideration. Don't you think so?

But to get back to my subject: I'm now a photographer. It gives me an important feeling; and, if I don't have to show samples of my work, no one would know but that I really am one. I've made sixteen pictures so far, and one is good. The other fifteen are divided into classes. Five of them are too thin because there wasn't enough sun where I wanted to make the snapshot. Eight more are what I call "soft-focus effect". They aren't, really; but I can't tell how far fifteen feet is and there never is a yardstick where I'm doing my most serious work. The other two are of my desert-tortoise. He's two inches across the back. I put him on a stone and photographed him from two positions. The rock is there and the speck on top is the tortoise.

I use Eastman roll-film and do my own developing in a tank. Daddy makes me weigh out my chemicals

on a pair of balances and do all the work myself, except that Mother makes me wear an apron on account of the pyro. Until I have more experience, I'm going to use the same formulas Daddy does. Besides, it's cheaper. He's got the chemicals already bought and paid for. I use Azo paper and M-Q developer. I can't tell the difference between average, flat or contrast negatives, so I use average on all of them and it does very well. There is a different fixing-bath for films and paper. They're already mixed in large bottles; but I like the one for films better. It's "chrome-alum fixing" bath and is a beautiful shade of green, as the drug-stores put in windows for advertising. Chrome-alum smells like a candy-store.

I read PHOTO-ERA MAGAZINE and the criticisms they make on the pictures sound reasonable. When I make pictures just like them, my results are not the same. However, Daddy says I have one advantage, my improvement lies ahead of me and it's not every one that has a future. Readers of PHOTO-ERA MAGAZINE surely have boys and girls of their own or are friends of boys and girls who are interested in photography. It won't be long before we young folks will be the contributors to the Beginner's Contest and reading the magazine now will help. You can't know too much about anything. (That isn't original with me, but it's good sense). When I do work good enough to be shown, I'll send you some.

After reading this over it seems to me that it's mostly composed of "I's"; but probably that's just as well because the whole thing is about my camera and me. There's another thing, too; in California most artists have bobbed hair and perhaps that's the reason; about making good pictures, I mean. Mine is long. In closing, may I ask a favor. Will you enroll me as a private in the reserve corps of the great army of photographers? I like the feeling of being one of you, and it's comforting when you develop prints from films you expected so much of.

MELLOR HARTSHORN.

New Agencies of Agfa Products, Inc.

THOSE of our readers who expect to visit Havana and Santiago de Cuba this winter will be interested to know that they may obtain Agfa roll-films and film-packs at H. E. Hutterlu Co., M. de Gomez 568, Havana, Cuba and at A. Bonani, Jose. A. Saco. bj. 18, Santiago de Cuba, Cuba. No doubt there will be many American visitors to our southern neighbors, and a reliable source of a supply for fresh film or accessories is well worth having in mind.

When Would You Like to Begin?

WE receive many subscriptions from individuals who express their interest and enclose their remittances but say nothing about the month with which they would like their subscription to begin. It would be a real service if those who subscribe would definitely mention the month to begin the subscription.

DO YOU know, I have come to the conclusion that if one wishes to preserve one's enthusiasm for photography, a sense of humor is very essential. For instance, if one should meekly, but with secret pride, hand a negative to one of the "highbrows" with the request that he will advise you on the best method of reducing the said negative, and if after a moment's scrutiny, he should answer "a hammer!"—well! where in the world would you be without a sense of humor?

DONALD SMITH in *The Club Photographer*.



RECENT PHOTO-PATENTS



THE following report is made of all photographic patents, the last issues of which have been disclosed to the public, from the records of the United States Patent-Office. This report is made exclusively for the PHOTO-ERA MAGAZINE from the patent law-offices of Norman T. Whitaker, 1006 F. Street, Washington, D.C. Copies of any of these patents may be obtained by sending twenty cents in stamps to Norman T. Whitaker, 1006 F. Street, Washington, D.C.

Leon F. Douglass of Menlo Park, Calif., has received his patent, number 1,508,509, on a Method of Masking Photographic Film while Exposure is Being Made.

Developing-Film Hanger patent, number 1,508,804, has been issued to George D. Pappajion of Danielson, Conn.

Patent, number 1,508,947, on a Film-Developing, Fixing, and Drying Frame has been issued to John O. Allen of Salt Lake City, Utah.

Isaac J. Feltenstein of St. Joseph, Mo., has received patent, number 1,509,399, on a Roll Attachment for Cameras.

Plate-Holder is the title of patent, number 1,509,414, issued to Harvey L. Boyer of Philadelphia, Pa.

Oscar Fournier of Symmes Township, Ohio, has assigned his invention to the U. S. Playing Card Company of Norwood, Ohio. Patent, number 1,509,806, on a Photoprinting Machine.

Patent, number 1,509,701, on a Film and Plate-Holder has been issued to Harold D. Bernstein of New York City.

A Film-Winding Attachment for Cameras has been issued to Edward J. Quinn of Roanoke, Va. Patent, number 1,514,789.

Nathan Sulzberger of New York City has received patent, number 1,516,161, on a Photographic Developer.

Patent, number 1,516,199, on a Photomechanical Process for Producing Bas-Reliefs has been issued to Frederick H. Monteath of Sydney, New South Wales, Australia, assignor to Monteath Photo Sculpture Limited of Sydney, Australia.

A joint patent, number 1,516,824, has been issued to Leopold D. Mannes and Leopold Godowsky, Jr., of New York City, on Color Photography.

Film and Method for the Production of Colored Pictures patent, number 1,517,049, has been issued to Jens H. Christensen of Holte, Denmark.

A joint patent, number 1,510,722, on a Lens Carriage for Photographic Cameras issued to Philip W. Tierney and David A. Sine both of Rochester, N.Y., assignors to Eastman Kodak Company.

Photographic Shutter patent, number 1,510,597, has been issued to Rudolph Klein of Rochester, N.Y., assignor to Ilex Optical Company, Rochester, N.Y.

Herman C. Boeducker of New York City has received patent, number 1,510,597, on a Negative Glass and Means for Holding Same.

Eastman Kodak Company have been assigned patent, number 1,510,712, on a Photographic Printing Machine. Inventor is Donald H. Stewart of Rochester.

Another Photographic Printing Machine has been assigned to Eastman. Patent, number 1,510,715, issued to Ray L. Stinchfield of Rochester, N.Y.

An Automatic Photographic Printing Machine, invented by Gerret Rekers of Rochester, N.Y., has been assigned to Eastman Kodak Company, patent number 1,510,748.

Patent, number 1,511,584, an Apparatus for Automatically Printing Photographic Paper or Film with Latent Image has been issued to Emmanuel J. W. Soulier of Nanterre, France.

Josef Engl of Berlin-Grunewald, Germany, has received patent, number 1,512,681, on a Production of Sound-Record Photographic Positives.

Another United States patent was issued to Jean L. Baille, of Paris, France, patent, number 1,512,664, on a System of Braces for Supporting the Folding Beds of Folding Cameras.

Camera is the title of the patent issued to Howard A. Whiteside of New York City, number 1,512,514.

Patent, number 1,512,785, on a Diaphragm for the Objectives of Stereocameras has been issued to Johannes Mittasch of Heidelberg, Germany.

A joint patent, number 1,510,410, on a Camera has been issued to Walter C. Menyhart and Benjamin Katz both of New York City.

Alexander T. Koppe of Chicago, Ill., has assigned his patent, number 1,510,007, to Offset Directoplate Company. The patent is on a Machine for Making Offset Press Plates.

Eastman has been assigned patent, number 1,510,738, on a Method of Protecting Films and Loading Same in Cameras, invented by John G. Capstaff of Rochester.

Henry S. Satterlee of New York City has received patent, number 1,511,042, on a Method of Identifying Documents.

Camera Back patent, number 1,511,157, has been issued to Carl Bornmann, Jr., of Binghamton, N.Y., assignor by mesne assignments to Ansco Photoproducts, Inc., of New York City.

Patent, number 1,513,176, on a Case for Containing Cameras has been issued to Charles H. Lyde of Dordridge, England.

Ross Carey of Klein, Mont., has received patent, number 1,513,444, on a Cable Release for Cameras.

Method of Ascertaining Cameras Stops, patent number 1,513,379, has been issued to Fletcher Douthitt of Detroit, Mich.



COMING EXHIBITIONS



JANUARY 1 TO JANUARY 30, 1925. Third Exhibition of Pictorial Photography under auspices of the Southwest Museum and The Southern California Camera Club. To be held at the Southwest Museum, Marmion Way and Avenue 46, Los Angeles, California. Last day for receiving prints December 17, 1924. Only artists of the Rocky Mountain and Western district are eligible to this exhibit.

JANUARY 19 TO 24, inclusive, 1925. First Annual Exhibition of the Photographic Circle of Montreal. Last day for receiving prints, December 31, 1924. Further particulars may be obtained from Mr. Roderick Bergeron, secretary, P. O. Box 154, Montreal, Canada.

MARCH 1 TO 31, 1925. Twelfth Pittsburgh Salon of Photography, Pittsburgh, Pa. Entry-blanks from P. F. Squier, 237 Avenue B. Westinghouse Plan, East Pittsburgh, Pa.

MARCH 7 TO 31, 1925. The Sixth Annual Salon of Photography to be held in The Albright Art Gallery, Buffalo, New York. Under Auspices of Buffalo Camera Club. For entry-forms write to Lester F. Davis, secretary, 463 Elmwood Ave., Buffalo, N.Y. Last day for receiving prints, February 9, 1925.



THE PUBLISHER'S CORNER



We Express Our Appreciation and Thanks

AS WE go to press with this first number of the new year, we wish our readers and advertisers to know that we appreciate the many Christmas and New Year Greetings which have been coming with every mail. Moreover, we acknowledge the large number of personal letters in which the writers express their good will and friendship. In the next issue we shall attempt to express our thanks and to do so to better advantage. However, at this time we do not wish to overlook the opportunity to let our friends know that their messages are arriving and that they are deeply appreciated.

WILFRED A. FRENCH

A. H. BEARDSLEY

My Friend—Sigismund Blumann

IN this issue there appears a splendid article by Sigismund Blumann, editor of *Camera Craft*. It is his contribution to PHOTO-ERA MAGAZINE in exchange for my article which appeared in the November, 1924, number of *Camera Craft*. To Mr. Blumann belongs the credit of beginning what I hope will prove to be a regular exchange of articles between the editors of photographic magazines throughout the world. Mr. Blumann and I are competitors only in the desire to see who may best serve. He edits a photographic magazine of which he and its readers may well be proud. I am glad of his success. We have much in common, and are striving to reach the same objective—not wealth, but just the privilege to serve well all who love photography. He is my friend and an old contributor to PHOTO-ERA MAGAZINE. Thus may the readers of both magazines know that the East and the West can meet on the common ground of mutual respect, good will and friendship. Yes, perhaps, Mr. Blumann and I are both photographic idealists and should be brought back to earth and be taught to dream our dreams elsewhere than in the pages of our magazines. Very true and businesslike, no doubt. Yet, according to our good readers they find an indefinable something in our pages which encourages, stimulates, enables them to win awards and make a practical success of photography; and, best of all, I believe they know that there is a real friend in each editorial chair.

Is It Really True?

A SHORT time ago, I received a letter from an old subscriber who was kind enough to say that he liked PHOTO-ERA MAGAZINE better than ever. Then, he went on to make some suggestions which were practical and worth careful consideration. However, what interested me especially was his assertion that some readers of PHOTO-ERA MAGAZINE really did not care for good paper, careful printing and thorough editorial supervision. In short, he implied that editorial and typographical quality was wasted on many of the present readers. In fact, he added that we were giving more than we should for the money. Whatever he, or anyone else, might say would not change my decision to have high ideals and try to reach them. So long as I am the Publisher, PHOTO-ERA MAGAZINE will be well printed, carefully edited and its text and advertising pages kept clean so that it may go into

any home for young and old to read. Whether this policy is appreciated or not, I know that I am happier in my work and sleep better nights. The cynic will say that there is no money in this sort of thing; but money is not everything. A man's peace of mind is worth a great deal. Well, I am sorry if some readers think that the quality of the magazine is wasted; but is it really true?

Your Subscription for 1925

NO DOUBT most of my readers are receiving cards, notices and letters which request the prompt renewal of their subscription to this or that magazine. I am receiving them myself, and I know that I have enough on my desk now without adding more. However, I hope that those whose subscriptions have expired will feel that PHOTO-ERA MAGAZINE is worth having.

Our subscription-list is steadily growing. There must be a reason for it.

Please Read Our Competition Rules

OWING to the number of new readers and subscribers who have been added to our list within the past few weeks, let me suggest that those who plan to send in pictures to our competition read the rules carefully. This does not imply that the rules are complicated or difficult to follow. The suggestion is made simply to have it clearly understood just what prizes are offered and how they are awarded. Moreover, unless prints are sent in properly packed, carefully marked and data supplied, the jury may see fit to eliminate the picture. This is not requested, "just to be cranky"; but because contestants render a real service by this co-operation.

The Criticism of Competition Pictures

IT is a pleasure to criticise the pictures sent in by our readers. If I can be of any service in this direction, I am glad. Each month the number of requested criticisms grows larger and now it is getting to be a problem to get the pictures all criticised before the next month's competition pictures arrive. I might say that it is a real undertaking to criticise a hundred or more pictures by letter and at the same time keep all the correspondence and editorial work in motion. I mention this for the benefit of those who might feel that the criticisms were long in coming. However, I shall do my very best during the new year to return the pictures with criticisms as soon as possible after the competitions are judged. Yet, should there be a delay, I ask the indulgence of our readers and their sympathy for an exceedingly busy, although willing friend.

When You Don't Get the Magazine

Sometimes there is an unintentional slip between the subscription-agency and our office. This results in the subscriber failing to receive copies. If the magazine does not arrive within a reasonable time, it will help all greatly to notify our office promptly.



COUNTY NATIONAL BANK AND TRUST COMPANY
(Santa Barbara, California)

DR. H. P. MOSELY

FIRST PRIZE—KALOSAT PHOTOGRAPHIC CONTEST



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The Eye, the Camera and Focusing

ROBERT T. POUND



It is a curious and little recognised fact that any photograph must pass through a lens in the eye before it makes an impression on the beholder. So far as I have been able to discover, very few photographers make any conscious attempt to fit their picture to the eye of the viewer. Some professionals achieve this result: I do not need to name them. In other words, a well-planned picture that fits the eye makes an instantaneous appeal to any one. The question is: What fits the eye?

I do not say eyes because a photograph is flat and has been made through one eye—the lens—in the first place. In addition, many people do not possess binocular vision. They see with only one eye, the master-eye. To understand this, hold a ring at arm's length from the eyes and look at an object about ten feet away, with both eyes open. Look through the ring. Now close first one eye, then the other. You will probably find that you have really been looking through the ring with one eye, while the other orb took a rest.

In addition, many human beings, as well as most dogs, cats, and horses, are myopic or short-sighted. In people this defect is usually corrected by glasses or the muscles of the eye. There are other defects of refraction, such as far-sightedness, astigmatism, and failing vision caused by age. Also some people are color blind, which affects their judgment of tone-values as reproduced by the camera. Two other factors which occur in our consideration of normal or corrected sight are perspective and ability to see detail.

These two factors are important to photographers because, if they are improperly handled, the picture resulting from one's efforts with a camera will never be entirely pleasing to the eye, no matter how well the technical work and the placing of the objects photographed be

accomplished. In order to see the importance of perspective and breadth of detail to the photographer, a further study of the human eye as a camera is worth while.

In a normal eye there is an iris which opens or closes to admit more or less light. Back of the iris is the crystalline lens, which focuses the light-rays on the retina, the analog of a photographer's sensitive film. According to an eye devised by Donders, an object one meter (39.37 inches) long, placed at a distance of 15 meters (50 feet) from the eye, will produce an image on the retina measuring one millimeter (about 1/25 inch) in length. Carl Zeiss says that a lens of ten-inches focal length used on a $3\frac{1}{4} \times 4\frac{1}{4}$ plate will give an image of objects in their true and natural relief. This is about double the focal length normally fitted to cameras which use a $3\frac{1}{4} \times 4\frac{1}{4}$ plate. One begins to see why good photographers insist upon using a lens of long focal length whenever possible.

Focal length is intimately connected with perspective. Take, for instance, a yardstick and place it twenty feet away. Now hold a ruler at the normal reading-distance—about fourteen inches—in front of the eyes, and measure in inches, the apparent length of the yardstick. Then, make a picture of the yardstick with your camera at the same distance and measure the length of the stick on the photograph. This experiment will explain why most photographs appear out of drawing. They must be held much closer to the eye than one normally holds objects to be viewed, if the objects pictured are not to appear improperly reduced in size. In order to obtain pictures which are not so greatly reduced, most camera-users approach their subject as closely as possible and therefore introduce exaggerated perspective. The remedy for this with an ordinary camera is to make pictures at a greater distance than one would ordinarily select and then enlarge the result.



THE LONE ELK OF MOHAWK TRAIL

FRED HAHN

SECOND PRIZE—KALOSAT PHOTOGRAPHIC CONTEST

The second factor which a lens often represents differently than the eye is the angle of sharp vision. This brings us into the field of the soft-focus and "fuzzygraph" photographers. It seems to be the delight of amateurs to get every leaf of every tree in sharp detail, and the failing of present-day professionals, in my opinion, is their predilection for soft-focus pictures. Soft-focus lenses and devices effect a great saving in the amount of retouching necessary; but the resulting photograph is no more natural, in most cases, than the amateur's print of needle-point definition. Please don't shoot at this target until I load my gun.

In testing the visual angle of man, two parallel lines are employed. For a normal eye, with the parallel lines at the greatest distance at which they can be perceived as separate objects the visual angle is 1' (Fuchs). It is true that a man can see objects in a horizontal field of approximately 180 degrees by using both eyes, and mov-

ing them. Reasoning from this fact many people claim that a lens which covers an angle of sixty degrees represents the normal angle covered sharply by one eye. This is just as incorrect as the claims of the soft-focus defenders. To prove my contention, cover up one eye. Focus the other eye *sharply* on the left-hand letter of this line of type, and attempt at the same time to name the last letter at the right hand end of the line. *The eye must be held stationary during this test.*

That last sentence contains the joker. The human eye holds a roving commission, and is under orders to cover the greatest area possible. The amateur who sees sharply every leaf on the tree does so only by moving his eye. Only a very small area of the total field of vision of a stationary eye is in sharp focus. From the center of this field outward the definition rapidly falls off, until at the edge of the field of vision, of the stationary eye only, masses can be dis-



THE DANCER

E. D. GROUT

THIRD PRIZE—KALOSAT PHOTOGRAPHIC CONTEST

tinguished, and those as blurs. In plain language, the professionals who blur their whole picture and the amateurs who sharpen their efforts are both wrong. The results are unnatural, forced, and incorrect. Now shoot!

In order to produce an ideal photograph, then, one would require a lens of at least double the diagonal of the plate used. This lens should give a definition that falls off rapidly from the center of the plate outward. The object in the center of the plate should be in sharp focus. Lenses of this type are both numerous and cheap, in fact they were the only kind to be had before the advent of modern anastigmats. The only defect of a lens which meets the above requirements is lack of speed; that is, the only defect standing in the way of pictures that fit the eye.

Although there are diffusion-discs made now, the effect is a diffusion of the entire picture. I should suggest a natural diffusion-producer

in an eccentric mount so that the principal object could be sharply focused, even if it were not in the center of the plate. The designing of this device should not be difficult.

In the absence of really natural pictures made by photography, I, as an amateur, must protest against what seems the prevailing habit of regarding the degree of diffusion in a picture as a measure of the photographer's art. Of course, I recognise that many—if not most—of the most artistic photographers habitually employ soft-focus lenses when making other than commercial photographs.

To sum things up: the sharp picture represents that which is seen by the normal, moving eye, whereas an entirely diffused vision can be obtained only by looking from the corner of one's eye. The natural picture has been explained, the wholly sharp photograph is second, and the diffused result is a poor third.



BRONX RIVER, SUMMER

FRANK O'NEIL

HONORABLE MENTION—KALOSAT PHOTOGRAPHIC CONTEST

Some Notes on Stereoscopic Color-Photography

E. V. GLANVILLE



ANY user of a stereoscopic camera, with the exception of the purely roll-film models, such as the Stereo Kodak and the Ernemann Bob XV, has it in his power to add to the illusion of relief and perspective in his pictures the charm of natural colors also. As a matter of fact, the stereoscope is probably the most satisfactory means of viewing colored transparencies. There are two suitable processes available to the American amateur—the Lumière Autochrome, and the more recent Agfa—and it is purely a matter of personal choice as to which to adopt. Both use screen-plates, and the manipulation is very similar in each case.

The first requisite is the compensating-filter

which may be mounted either in front of, or behind the lenses. For a camera provided with a focusing-adjustment the more convenient position is usually in front; but the second position has the advantage, in a fixed-focus camera, such as the popular Verascope, that the displacement of the image due to the thickness of the glass in the filter compensates more or less for the greater distance of the sensitive surface from the lens, owing to the fact that it is necessary to expose the plate through the glass, in other words, with the film-side turned away from the lens.

These compensating-filters are available for various artificial light-sources, in addition to daylight; a fact which opens up a very extensive field for the amateur photographer, as some of



THE SHADOW

HENRY HALL

HONORABLE MENTION—KALOSAT PHOTOGRAPHIC CONTEST

the most interesting subjects for the stereoscope are small objects such as flowers, crystals, small insects etc., all of which can be photographed satisfactorily at home by artificial light. In the case of small objects, very close to the camera, certain difficulties arise, owing to the fact that the images may be displaced so far from the center of the plate that satisfactory viewing is impossible. At some future date I hope to write some notes on this aspect of the subject, which is outside the scope of this short article.

As the thickness of the plates is about 1.5 mm., and it is necessary to put a black card behind them to protect the delicate sensitive surface, it will be found that some plateholders made for use with extra-thin glass-plates cannot be used. Most makers of stereoscopic cameras supply special plateholders for use with color-plates. When magazines are used it is generally possible to obtain special septums for use with them, and

the usual twelve-plate magazine will hold eight color-plates.

The handling of the plate after exposure does not differ from that of an ordinary color-transparency, until we come to the question of mounting it for viewing in the stereoscope. If the two pictures are made on separate plates, which is unusual, it is merely a question of transposing them and then mounting behind a cover-glass with lantern binding-strips. Nearly always however, the two pictures are on a single piece of glass. It is possible to buy viewing boxes or stereoscopes, fitted with reversing prisms for the 45 x 107 mm. and 6 x 13 cm. sizes, which obviate the necessity of cutting the plate and transposing the two halves; but these special stereoscopes are unfortunately costly and have the disadvantage of a somewhat narrow field of view and low magnification. The latter is perhaps of no real importance as it is desirable to avoid high mag-



"IT'S YOUR TURN"

LOUIS F. BUCHER

HONORABLE MENTION—KALOSAT PHOTOGRAPHIC CONTEST

nification, so as to minimise as much as possible the effect of "graininess" in the plate.

Most workers, however, use the standard model stereoscope and cut the plate in two with a diamond, afterwards transposing the halves. In the case of the 6 x 13 cm., 7 x 13 cm., and 10 x 15 cm. sizes, it suffices to make one cut in the middle of the plate; but the 45 x 107 mm. size requires that a narrow strip should be cut from the center between the two pictures, necessitating two cuts. Jules Richard of Paris provide a very convenient cutting gauge and diamond for this purpose, which reduces the process to a very simple one indeed. They also sell very handy frames of oxydised brass, in which the two pictures can be mounted for viewing very quickly, by merely dropping in place and fastening by bending some small tabs.

Contrary to what one might expect, it is possible to obtain very satisfactory results with the 45 x 107 mm. size plate, particularly if the stereoscopes with special short-focus lenses are avoided. It would seem that in the fusion of the two images the eyes lose sight to some extent of the granularity of the separate pictures, owing to the non-coincidence of the almost microscopic starch grains in each. Nevertheless, it would probably be better, if much color-work

is to be done, to choose a larger size such as the 6 x 13 cm., although for monochrome work the writer prefers the 45 x 107 mm. size, owing to its greater portability and the lower cost of materials. The larger sizes have also the advantage of enlarging rather better, a point worth considering; if it is intended to make many large prints.

The amateur taking up color-work for the first time may find the following remarks helpful. If the image, after removal from the reversing-bath, is dark, and lacks detail in the shadows, it indicates underexposure. Overexposure, on the other hand, manifests itself in a thin image with little contrast. If the first development is not carried far enough, the finished slide will be very dense, as the second development will probably not reduce all the unreduced silver. If the first development be carried too far, the final result will be thin. For viewing in the stereoscope, the slide may with advantage be somewhat denser than is desirable for projection in a lantern, and the judicious use of an intensifier or reducer, as the case may require, is sometimes helpful.

Washing should be thorough; but not unduly prolonged, as lengthy washing may lead to loss of brilliancy in the colors. The same effect



DOROTHY

J. HERBERT SAUNDERS

sometimes results from slow drying. The film is very susceptible to damage, and it is important that the solutions are not too warm or differing much in temperature, so as to lessen the possibility of frilling. It is not desirable to use alum or other hardening baths as a rule, as their use occasionally leads to the film separating from the starch-grain layer, with a consequent loss of color in patches. Green spots or lines result from scratches, or other mechanical injury to the film.

It is desirable to varnish the slide as a protection, using almost any of the standard varnishes which do not contain alcohol. A varnish made by dissolving 250 grs. of gum demmar in about 5 ozs. of benzole, is probably as good as any. The film must be perfectly dry before using the varnish, and it is important to secure a thin even coating, otherwise it is possible that brown markings may appear in time where the varnish is too thick.

It must not be supposed from this list of

possible troubles that the process is very difficult. As a matter of fact, reasonable care, and adherence to the maker's instructions for the particular plate in use, will ensure good results; but unless provided with some guide to possible defects and their causes, it might be puzzling for the beginner to figure out for himself their origin and remedy.

In any case no lover of the stereoscopic camera will be disappointed if he decides to supplement his monochrome work by some transparencies in color, as the effect to be obtained is well worth the slight extra trouble. Depth, roundness, relief and *color*, all reproduced with photographic accuracy; surely, that is enough to appeal to anyone interested in the reproduction of scenes in the most realistic manner at present available. [We take pleasure to refer to our new stereoscopic department which is arousing the interest and support of many enthusiastic, expert stereophotographers. EDITOR.]



FIGURE 17 MILKY WAY IN CONSTELLATION OF OPHIUCHUS

The Camera in Star-Land

JAMES STOKLEY, M.A., F.R.A.S.

Part III

INTERESTING as the comets and planets are, in view of their proximity, the chief study of modern astronomy is of the more distant objects, as the stars and nebulae.

If we are to know anything about a star, the first fact to learn is its location. The utility of photography in making star-charts has already been indicated. After the plates are made it is necessary to measure them to determine the positions of the stars, and this is done with a so-called "measuring engine", consisting essentially of a microscope through which the plate can be viewed and which can be moved accurately in two directions by screws provided with micrometers. These enable the extent of the motion to be determined with great precision.

In addition to charting the positions of the stars with respect to each other, it is important

to know their distances. This is done for stars that are fairly close by finding the parallax, or the amount that the star seems to be displaced as the earth moves around in its orbit during the year. It is measured by the angle at the earth which two straight lines would make which pointed to the two extreme positions of the star. The farther away the star is, the less it will be, but at its best it is extremely small; for even the closest stars are so distant that, although light travels fast enough to go seven times around the earth in a second, the light from the nearest star takes over four years to reach the earth. No star is known with a parallax as large as one second, which is the angle between two straight lines three and one quarter miles long, meeting at one end and an inch apart at the other.

The method of determining parallax consists in comparing the position of the star with that of

another close to it as seen from the earth, but so far away that its own displacement is negligible. At one time of the year, the star seems to be nearer the comparison star than it does six months later, when the earth is at the other side of its orbit and 186,000,000 miles away from the first position. By making photographs at each time, and carefully measuring them, the parallax, and hence the distance, of the star may be deduced. Since the application of photography, many observatories have been engaged in a co-operative program to find the distances of a large number of stars, but, compared with the total number that can be seen with modern

as they might appear, but are masses of dark material which look black against the bright background. This is another example of the work of Professor Barnard with the Bruce telescope. Among other useful works, he made a catalog of one hundred and eighty-two such dark areas. One of them is shown on a larger scale in Figure 18, and in Figure 19 is shown one of the most remarkable, the so-called "Dark Bay" in the constellation of Orion. Both of these were made with the 100-inch Mt. Wilson reflector, and without the use of photography, they could never have been detected. More dark material is revealed in the photograph of the



FIGURE 18 DARK NEBULA IN CONSTELLATION OF OPHIUCHUS

telescopes, only an infinitesimally small portion have been measured. Other means, one of which will be mentioned later, have been used to find star-distances, in some cases too far away for the older method.

Besides the application of the short-focus wide-angle objective to cometary and asteroid photography, it has proved of value in recording the distribution of large fields of stars. For instance, Figure 17, is a picture of a part of the constellation of Ophiuchus, and shows not only the great "star-clouds" consisting of millions of stars, but also a number of dark markings. These are not holes in space, devoid of stars,

Trifid Nebula, Figure 20, where the dark rifts are believed to be due to occulting matter in front.

Some of the most magnificent objects in the heavens are the nebulae, many of which show a very definite spiral structure, and the shape of others seems to be merely a matter of chance. Before the use of photography, these had been observed and a fine drawing of the Great Nebula in Orion made by Bond, is shown in Figure 21. However, the great superiority of the photographic plate to record fine detail is shown by comparing the drawing with a photograph of the same object, made nearly fifty years later



FIGURE 19 DARK BAY IN ORION

with the 100-inch telescope, which is reproduced in Figure 22. One of the finest spiral nebulae in the sky, known as the "Whirlpool Nebula", in the constellation of the Hunting Dogs, is shown in Figure 23. In even the best telescopes, this beautiful object can scarcely be seen as more than a faint patch of light.

So far, the applications of photography to the study of the heavens that we have considered were in the nature of extensions to the older visual methods. The value of spectroscopy in the study of the sun has been mentioned; but, with the brilliant light of this, our closest, star, many facts that have been learned could have been found by visual observations through the spectroscope. With the other stars, however, the light at its best is not sufficient to give a satisfactory view of the spectrum, and here long-exposure photography has opened up a new field. In Figure 24 are shown some typical spectra, obtained with the Bruce spectrograph attached to the 40-inch Yerkes telescope. These are of four different stars, the stellar spectrum has dark lines on a light background. The

bright-line spectrum on each side is from the metal titanium, which was vaporised by an electric spark in front of the spectrograph so as to furnish comparison points.

In some cases, it will be seen that a comparison line coincides with one in the stellar spectrum. This is due to the presence of titanium in the star and illustrates the method of determining its composition. As the positions of the lines of all the elements are known, it is not necessary to use comparison spectra of each; but instead, the positions of the lines in the spectrum are measured and compared with those of known substances. A few lines have been observed which do not correspond with any element known to man. One is seen in the green part of the spectrum of certain nebulae and has been named nebulium, although it has never been identified on the earth.

Not only does the spectrum tell us what a star is made of, but it also tells us how it is moving. The principle of this is familiar to all. If one is standing by a railroad and a locomotive dashes by with the bell ringing, a noticeable



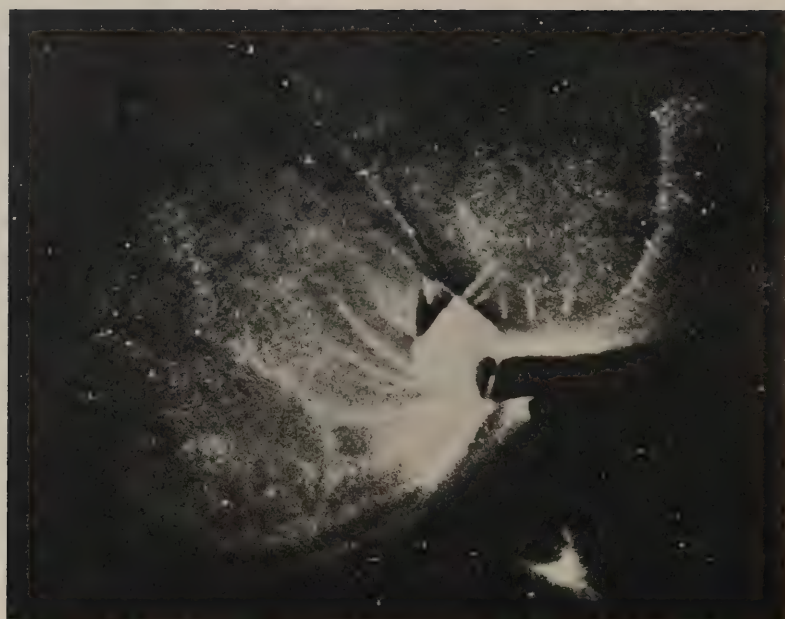
FIGURE 20 TRIFID NEBULA IN SAGITTARIUS

difference in the pitch of the bell will be observed after it has passed. Sound is due to waves in the air and the pitch, or whether a sound is high or low, is determined by the distance between these waves, or the wave-length. If the source of the sound is moving rapidly, the waves in front will be crowded together and the effect will be a sound of less wave-length or a higher pitch. Those in back, on the other hand, will be spread out, and the pitch will be lower than normally. The more rapid the motion, the greater will be the departure from the normal.

Precisely the same thing occurs with light, for it is also a wave-motion, and the spectral lines afford convenient marks to determine the wave-length, any difference in which affects the color, analogous to pitch. If the source is moving from the earth, or if we are moving from it, which is the same thing, the waves will be spread out and the shift in the spectrum will be toward the red end, which represents the longer waves. If the earth and the star are approaching

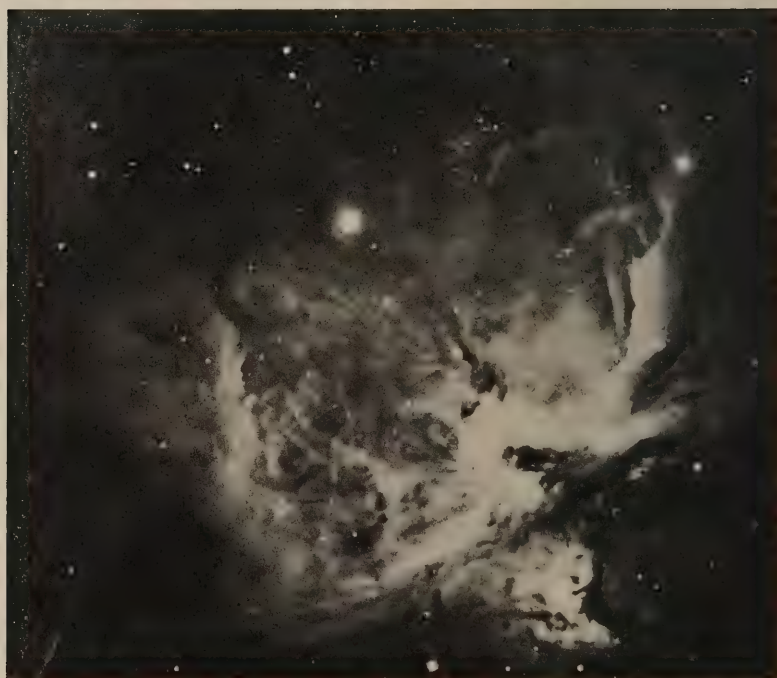
each other the shift will be to the violet. The shift is measured by comparing the lines in the star-spectrum with the comparison, titanium usually. Figure 25 is the spectrogram of a star in the constellation of the Lion. It will be seen that the lines of the stellar and titanium spectra do not coincide. Measurement of this displacement to an accuracy of within one-twenty-five-thousandth of an inch, has shown that star and earth were separating at speed of eighteen miles per second. Subtracting the earth's velocity in its orbit of sixteen miles a second, we see that the star is speeding away from the solar system at the rate of two miles a second.

Another important application of spectrometry has been developed in very recent years by Dr. Walter S. Adams at the Mt. Wilson Observatory, and permits the distance to be determined of stars too far away for the usual parallax measurements. The brightness of a star is called its magnitude. This is frequently measured photographically by making a photograph of the



(Drawing by G. P. Bond)

FIGURE 21 THE GREAT NEBULA IN ORION



(Photographed by Hubble. Compare with Figure 21)

FIGURE 22 THE GREAT NEBULA IN ORION

star slightly out of focus, to make its image a disc instead of a dot. By measuring the density of the image with a photometer, the star's magnitude may be determined. It depends on both the total amount of light that the star radiates, and its distance from us. The intensity of light when the distance is increased varies

relative intensity of certain lines in the spectrum, which, although not universally applicable, has already proved of tremendous value.

Nor are these the only applications of photography to astronomy. Many others might be mentioned, and to completely cover the field, it would be necessary to mention virtually



FIGURE 23 SIGNAL NEBULA IN CONSTELLATION OF HUNTING DOGS

according to a very definite law, and if we know the distance of the star and its magnitude we can calculate the actual brightness, or, as it is called, the absolute magnitude. Conversely, if we have any means of independently determining the absolute magnitude, we can find its distance. Dr. Adams has found a method of determining this value by measurement of the

every branch of astronomical research. It is not yet a century since Daguerre made the first photograph, and scarcely half a century since it has been successfully applied to the heavens. So short a time, in fact, that the light from less than a hundred stars that sent their messages to us at the time of the great Frenchman, has yet reached us. In years to come, more of these

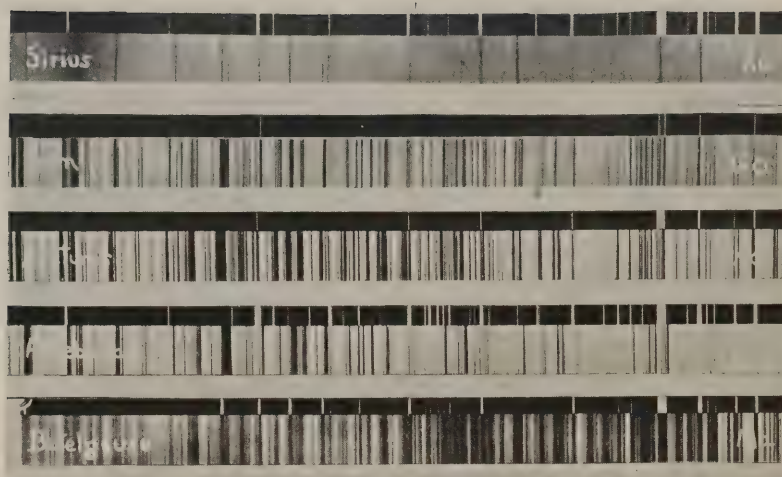


FIGURE 24 FOUR STELLAR SPECTRA

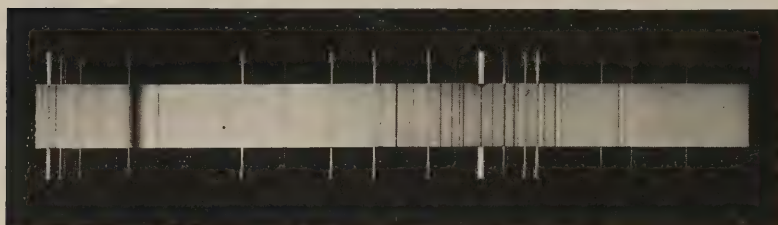


FIGURE 25 THE SPECTRUM OF ETA LEONIS

messages will arrive from space and astronomers will more and more be able to translate them, to read in them tales of the star from whence they come, tales that are to us the deepest of mysteries. Discoveries will be made and new

apparatus developed that would seem as strange to us as our ordinary equipment would to an astronomer from the eighteenth century, and, with its technique vastly improved, photography will play an increasingly prominent part.

Pictorial Advertising

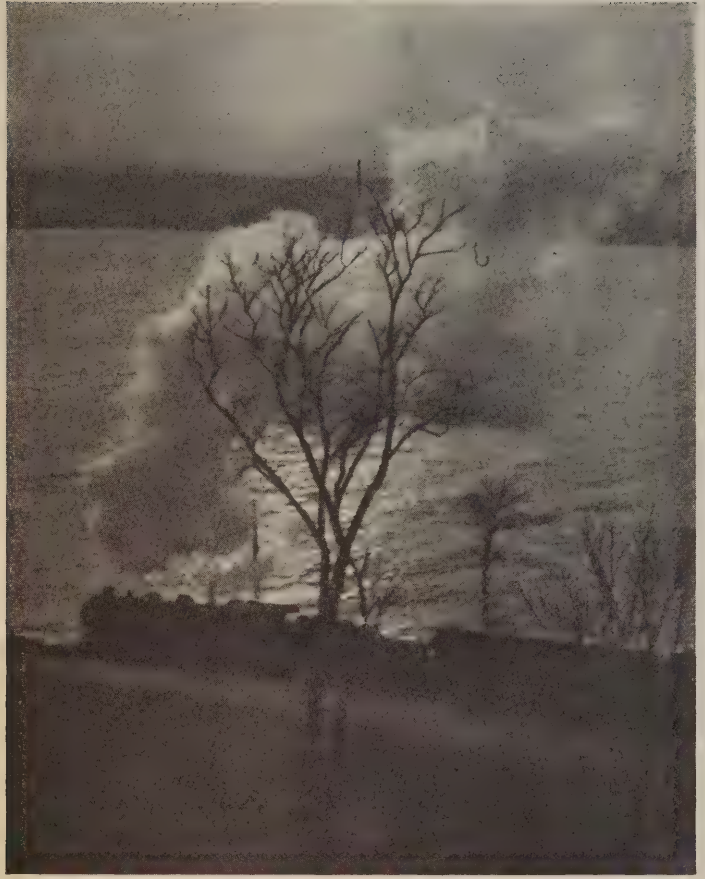
N. COURTNEY OWEN



It has been asked what a pictorial advertisement should be. A common phrase among advertising art-directors, making comparison of a series of photographic proofs to determine which is the best for their purpose, is "This one will sell the article best". This, off hand, might seem to indicate that art and composition were likely to be sacrificed to commercialism, but such is not the case. It has been my experience that the picture which sells the article best is more than likely the one which an exhibition-jury would also select, assuming

that "commercial" photographs were admitted to exhibitions. In my opinion the reason for this concurrence of opinion is that certain rules are followed, either consciously or unconsciously, in all of the best art-work.

The chief features in a pictorial advertisement are interest and simplicity. In fact, this applies to all art-work with the exception of portraiture, where likeness and delineation of personality are often the chief objects. Interest and simplicity, as above mentioned, are more closely related than probably is apparent to a great many workers. A picture must be interest-



POWER

N. COURTNEY OWEN

ing to receive more than passing attention. Why it is interesting is not so important, except to the student, and too much of a student-attitude in the creating of pictures will not produce the best in art. I would refer the reader to Mr. Heyworth Campbell's introduction to the 1922—I believe this is the date—edition of "Pictorial Photography in America". Regarding simplicity, it is an oft-repeated statement that the camera includes too much; but it should be remembered that the camera does only what it is made to do. It is not easy to keep a photograph simple, and frequently in the making of a pictorial advertisement the very objects will not lend themselves to simplicity. When pictures are made in the studio, difficulties due to lack of simplicity can often be overcome by using the lights, so that only the significant is retained, or so that the insignificant is only partly retained. It is more difficult, of course, in landscape-work to keep the composition simple; but by giving

proper attention to masses it can be done and the result, to me, is most pleasing. An example of work of this character is the gum-prints of Mr. Libby, of Portland, Maine, with which you undoubtedly are familiar.

As to the problems connected with photographic illustrations for advertising-purposes, they differ little from the usual consideration the making of any pictorial photograph receives. The chief difference is that the picture for advertising-purposes must include certain articles, or tell a certain story, whereas the amateur may follow his own inclinations as to choice of subject, etc. However, do not understand that the professional never "plays". In fact, if he is really interested in his work, it is mostly all play.

The methods of obtaining the desired result are usually left entirely to the artist, he having virtually unlimited leeway, provided that he shows certain objects or tells a certain story. Of course, how well he shows the objects, or how

well he tells the story depends upon how capable he is of grasping the idea, as given to him by the art-director, and of illustrating it in an interesting manner. It is my policy to require the pictures to sell themselves rather than to try to employ any personal salesmanship.

It should be thoroughly understood that advertising pictures must appeal to the public. The Advertising Art Director is familiar with the standard of the judgment of the public, and he continually exerts his efforts to obtain pictures of the greatest general appeal to the class of buyers which he desires to reach. One of the

most interesting art exhibitions is that of the Art Directors Club held annually at the Art Center in New York. Here the best in advertising illustration in all mediums for the previous year is shown. The signatures on these exhibits include a great many of the foremost artists of the day. Here may be seen a number of photographic illustrations which show—keeping in mind, of course, the product to be advertised—not only the type of illustration that appeals to the public and creates a market, but which is fine art as well.—*The Ground-Glass*, Monthly Bulletin of the Newark (N.J.) Camera Club.

Practical Kinematography

HERBERT C. MCKAY

(Book-Rights Reserved)

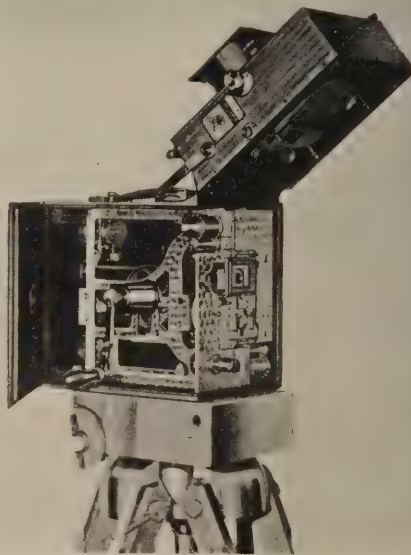
Chapter Three—Kiné Cameras

THIS list of cameras supplements those described in "Kinematography for the Amateur". **THE DE BRIE CAMERA.**—For the sake of consistency, I shall first describe a camera which is not fitted with a harmoniccam intermittent, yet one which has earned a high place for itself in the motion-picture world.

The De Brie camera is a French product. It is extremely light and compact, measuring 6 x 8 x 10 inches and weighing but seventeen pounds in the walnut model and twenty pounds in the all-metal model. The capacity is four-hundred feet of standard-gauge film, the small size and large capacity being obtained by placing the magazines side by side. The intermittent is a development of the rod and crank; but carried to a high degree of perfection.

Visual focusing is done by means of a focusing-magnifier which is placed at the back of the camera. This shows an enlarged, upright image. Visual focusing may be carried out by viewing the film, or a hole may be punched in the film by means of the punch used to mark film, the film reversed one frame and a ground-glass screen pulled into place by a lever, thus giving a focus at any time without spoiling more than one frame. A red glass may also be introduced so that the image may be viewed while making the film. Both focusing-jacket and diaphragm are actuated by rods which extend beyond the limits of the camera, so that by the use of a calibrated rod both adjustments may be made instantly from the back of the camera. In fact, every adjustment is made from this position.

A film-meter is supplied and is set in the back of the camera. Another dial on the back indicates accurately the speed at which the film is running through the camera, allowing the kinematographer to use any speed he desires and be sure that he is using this speed accurately. An automatic dissolving-shutter is supplied which is operated at the back of the camera. This shutter closes in seven turns of the crank or



DE BRIE CAMERA

three-and-a-half feet. Three sets of masks are supplied, one for sharp definition and one for diffused. The sharp-cutting masks are placed in position with the camera open and the soft-edged masks are used from the outside. The take-up is automatic in either direction, so that reverse is accomplished by mere reversal of the crank direction. By pulling a lever on the back of the camera and turning it, the speed-ratio is instantly changed from 8:1 to 1:1 or single crank. This may be done while operating for comedy-effects.

This camera is fitted to take lenses up to seventeen-inches focal length. The manufacturer lists the following lenses which may be fitted.

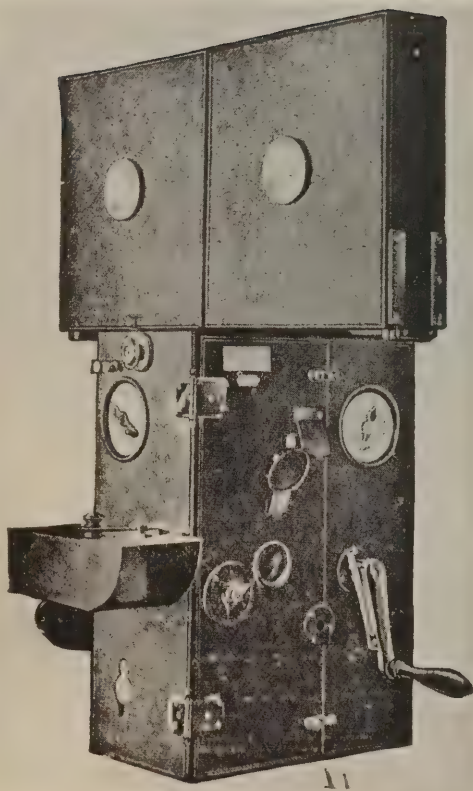
| <i>F/value</i> | <i>Focal length</i> |
|----------------|-------------------------|
| 3.5 | 13 $\frac{3}{8}$ inches |
| 3.5 | 15 $\frac{5}{8}$ |
| 1.9 | 2 |
| 3 | 2 |
| 3 | 3 |
| 3.5 | 3 |
| 3.5 | 4 |
| 4.5 | 5 $\frac{1}{4}$ |
| 4.5 | 6 |
| 4.5 | 7 |
| 4.5 | 8 $\frac{1}{4}$ |
| 4.5 | 10 |
| 5.4 | 9 |
| 5.4 | 11 |
| 5.4 | 13 |
| 5.4 | 17 |

Of course, all of these lenses may be fitted to any camera; but specially-designed mounts are made for use with the De Brie camera so that no extra support is needed, even with the largest lenses. This is a point for the traveler to note. All in all this is a very fine camera having the characteristics of both topical and studio-cameras. The latest quotation which I have received is \$1050. This camera is also made in purely topical models at \$400 and \$500, the difference being in lack of some refinements.

THE PATHÉ CAMERA.—This is the old standard kiné-camera and was for some time recognized as the finest camera made. It is unusual in that the crank is placed at the rear of the camera instead of on the side. It is leather-covered, with outside magazines of four-hundred foot capacity. The camera itself measures 4 $\frac{3}{4}$ x 8 x 12 and weighs twenty-two pounds. All operations and adjustments are possible from the operating-position at the back of the camera.

The following features are incorporated; film-meter up to one-hundred meters; regular speed and single exposure; movement forward or reverse; focusing by direct vision from back of camera or by scale placed on back of camera; film-punch to mark scenes; adjustable shutter and range-finding finder.

The automatic dissolve operates by gradually

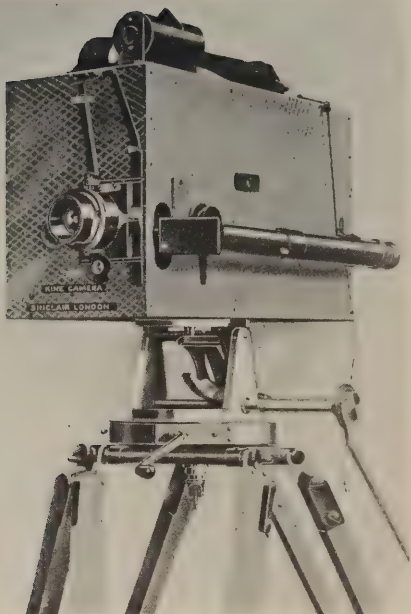


PATHÉ CAMERA

closing a diaphragm instead of by the double shutter. Many kinematographers say that this gives a more uniform fade than the shutter; but like many theories, this is not upheld in actual practice. It is true that the expert can notice a difference; but the audience in a theater would not notice the difference. A shutter dissolve can be fitted if desired.

I have never found a studio which refused to recognise this camera as a truly professional instrument. I can safely say that this camera will give you the utmost satisfaction in any branch of kinematography with the exception of high-speed work which requires special apparatus. The latest quotation on this camera is \$650, a price which brings it within the reach of any industrial kinematographer.

THE NEWMAN-SINCLAIR CAMERA.—This is an English camera, widely used for topical and traveler's use. It measures 5 $\frac{3}{4}$ x 8 x 14 and weighs eighteen pounds. The capacity is four-hundred feet of film contained in square, side by side, inside magazines. The camera is of all-metal construction.



NEWMAN-SINCLAIR CAMERA

The film-meter records units of ten feet on one scale, individual feet upon another and single frames on a third, making this feature very well adapted to trick-work. The back of the camera also carries focusing and diaphragm-scales, film-punch and dissolve lever which operates an automatic dissolve in either five or ten feet, with an audible warning at the termination of the fade.

This camera has many unique features which recommend it to the topical worker. It is so light running that the manufacturers state that satisfaction may be had by steadying this camera against any fairly rigid support and dispensing with the tripod. The camera is also equipped with a motor-drive with portable batteries so that the electric drive may be used anywhere. For airplane-use large handles are provided so that with the motor running any object may be kept in focus. In short, it is the principle of the Filmo and Eastman motor-driven miniature-cameras adapted to the standard-gauge camera.

Focusing may be done by scale from the back of the camera and in this connection I may state that the manufacturers not only guarantee this scale to be accurate but to be so constructed that it will not become inaccurate from wear. In addition, the usual prism-focusing glass is supplied, and a third device the N-S reflex focusing-tube is provided. This may be inserted into the space between the lens and film and

operates on the principle of the reflecting-camera. A perfectly clear ground-glass image may be obtained without removing the film from the channel.

The camera has the one-turn handle and reverse with automatic take-up. A set of special effects which replace the more common Goerz effects is supplied by the manufacturer, as are the masks. I have seen several 4 x 5 enlargements from N-S kine-film and the definition is excellent at this size.

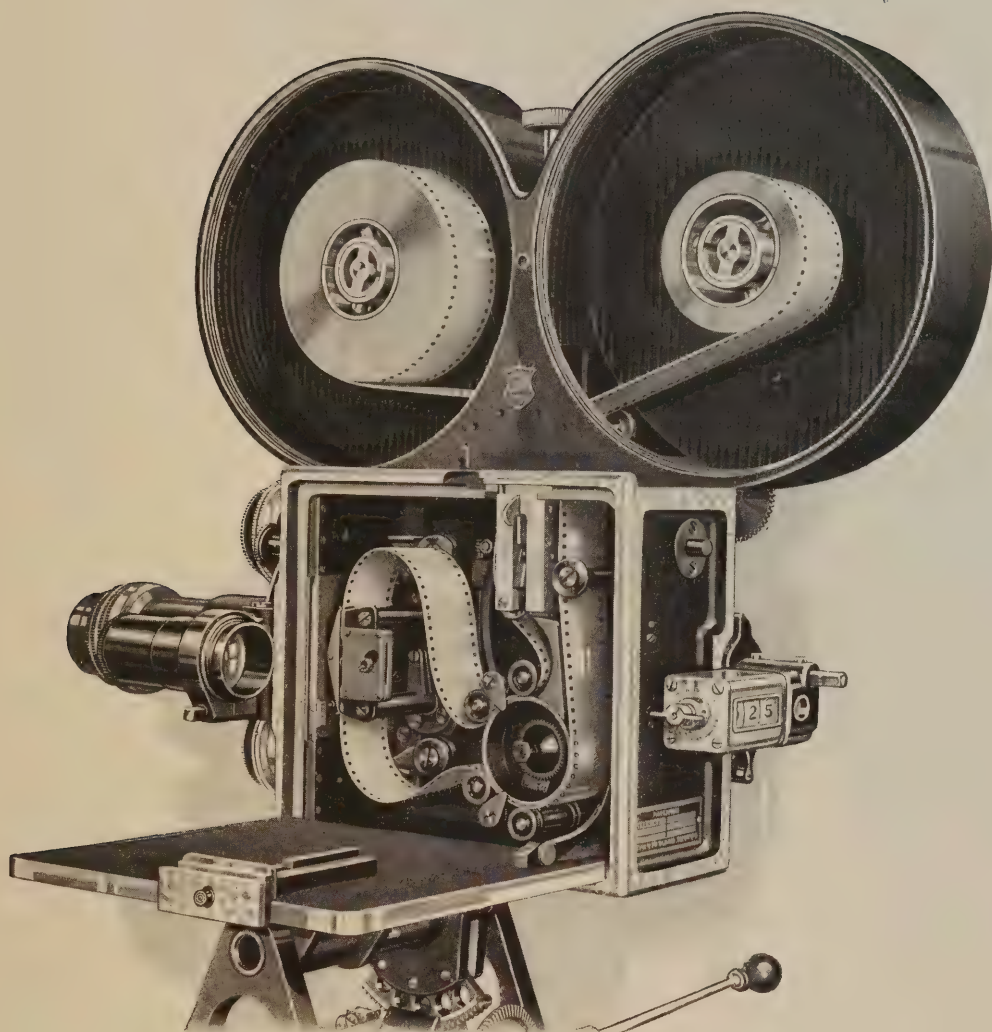
This camera costs £300 with dissolve, front-iris and the usual effects. The 3½ pound motor costs £25 and the 20-ounce batteries, each sufficient for four-hundred feet of film, cost four shillings each.

THE BELL & HOWELL CAMERA.—This camera is the acknowledged standard by which all other cameras are compared. It is the camera used in virtually all studios to make the large feature-productions and is recognised by all studios as a truly professional camera. It is used for studio, location and topical use and almost all scientific investigation is done with a camera which has been constructed about the Bell & Howell as a base.

This camera is most unusual in appearance as the conventional box-form has been discarded and the case made to conform to the shape of the enclosed mechanism. The case is all metal. The outside magazines are of the double type and are round, with screw-covers providing a positive, light-tight joint.

Focusing is provided for in a most excellent manner. The camera slides upon the tripod-top in such a manner that when it is at the right side the left lens on the turret is in the center of the slide; but when the camera is at the left of the slide the right lens lies in this spot. Thus by turning a given lens to the left side of the turret and sliding the camera to the right, it is in the photographing position; but by reversing the position of both camera and lens, the lens is in the same place with relation to the tripod and the field, but is in position in front of the focusing-screen which is viewed with a special magnifying focusing-glass. This allows focusing at any time without spoiling a single frame of the film.

The shutter is large and heavy, acting as a flywheel, and is adjustable. It has an inbuilt automatic dissolve, operating in four feet. The shutter has a maximum opening of 170°. The intermittent is one of the finest harmonic-cam types ever constructed. The claws are machined to fit the perforation exactly, and there are four of these. Two in the shuttle and two in the aperture-plate. The shuttle pulls the film away



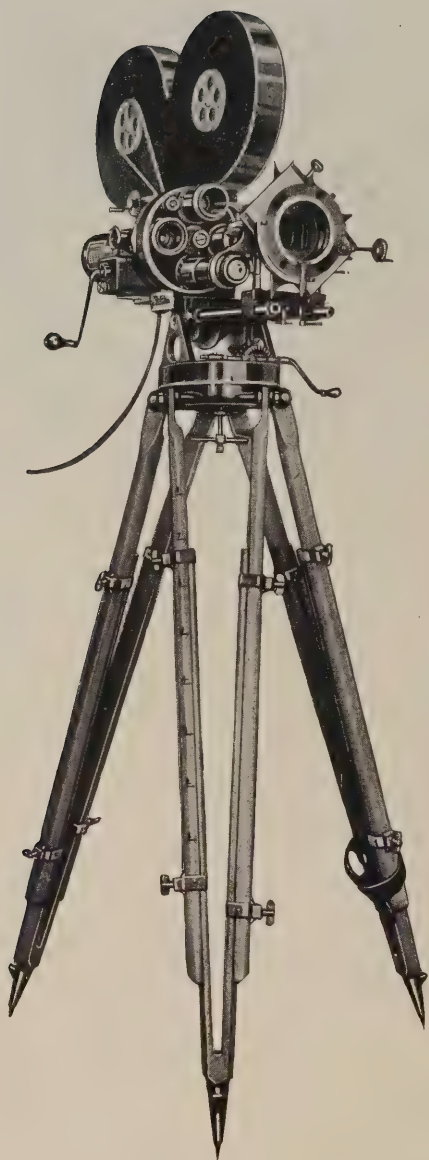
BELL AND HOWELL CAMERA—INTERIOR

from the aperture-plate and off the guide-pins, pulls it down one frame and pushes it against the aperture-plate firmly, registering it upon the two fixed claws. This mechanism prevents any contact between film and mechanism during the film travel, and also secures such positive registration that any number of multiple exposures may be made without fear of misregistration.

The take-up is the outside spring-belt, visible at all times and in plain view of the operator. This camera has a scene footage-counter, a Veeder counter for total footage and Veeder counter for individual frames. The shutter dissolve may be manually operated if desired.

Complete, ready to operate this camera measures $9\frac{1}{2} \times 15 \times 14\frac{3}{4}$ and weighs 27 pounds. The tripod weighs 19 pounds making a total of 46 pounds. This camera is sold on the unit basis so that a price cannot be given, but it will range from \$2250 to \$5000.

W. Butcher & Sons, Ltd. of London have placed a complete line of WILLIAMSON cameras on the market, ranging from the small 100-foot topical at £25 to the new Paragon model at £190/-—although the Newman-Sinclair is the ideal English model for the traveler, the explorer, the news-man and the experimenter, the Williamson Paragon is undoubtedly the English



BELL & HOWELL OUTFIT COMPLETE

standard studio-camera. This camera is made of polished oak with the entire case lined with thin sheet-aluminum. It measures $5\frac{1}{2} \times 12\frac{1}{2} \times 15\frac{1}{4}$ inches and weighs 25 pounds.

All photographers are familiar with the fact that English cameras have no claim to beauty of line and design; but all of their cameras of higher grade are beautifully made, with all evidence of master craftsmanship. They may

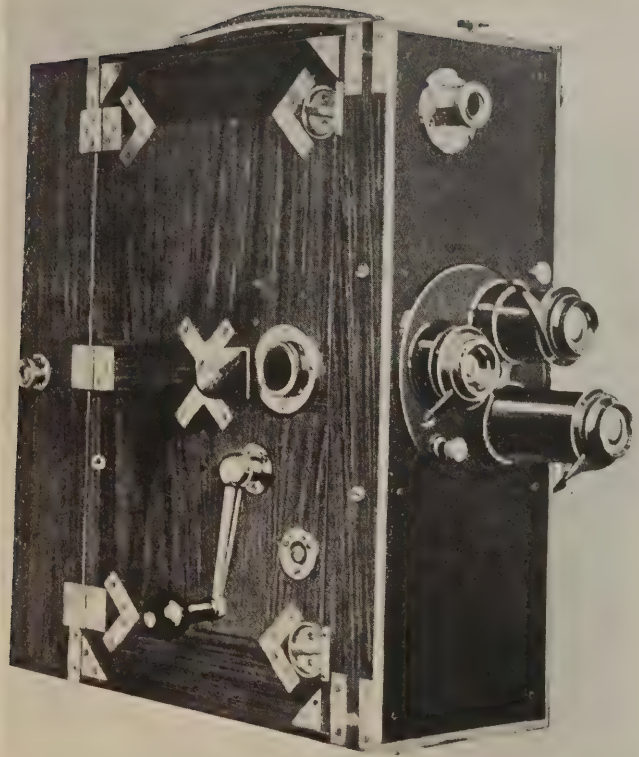
be bulky and of a heavy appearance; but they do the work. Just so with the Williamson Paragon. The box higher than it is long looks top-heavy, and the box-form is one which we usually associate with the moderate-priced cameras; but this camera is a proficient camera of professional quality.

The mechanism is mounted directly to the base and the crank fastened directly to the shaft, the case being independent and serving as protection only. The lenses are mounted upon a turret, which has three apertures. The Bell & Howell focusing design has been imitated. That is, the exposure and focusing-apertures are independent and the turret is swung through 120° to change a lens from focusing to operating-position. There is an inbuilt range-finding finder.

The take-up is by automatic clutches driven from the shaft by chains and sprockets. A 10° change in the crank being sufficient to engage the clutch, reversal is obtained by merely reversing crank direction. Of course, the camera is fitted with the usual trick-crank, in addition to the regular crank.

I believe that this camera is unique in possessing both shutter and iris-dissolves which may be operated independently or simultaneously. The iris is capable of being placed in any desired position in relation to the frame. This arrangement allows some very effective dissolves to be made. The 400-foot magazines are contained inside the case. The control-indicators are placed at the back of the camera. At the top is the opening of the finder, which gives an upright, magnified image. Below this is the speed-indicator which gives the number of frames per second which are being exposed. Below this the footage-dial with two pointers, one indicating single feet to one hundred the other indicating hundreds. Both pointers may be reset manually at any time. Below this is a shutter-dial in white with black shutter-indicator which shows graphically the opening of the shutter. Below this is a thumb-screw which controls the opening of the vignetting iris. Below this are two buttons, one of which throws the shutter dissolve into gear, the other serving a like purpose for the iris-dissolve. These buttons may be operated in conjunction or individually. At the bottom of the panel is an indicator which may be set to operate the dissolves in $1\frac{1}{2}$, 3, $4\frac{1}{2}$ or 6 feet. This adjustment effects both dissolves alike.

At the front edge of the top is a screw which gives a vertical movement to the vignetting-iris and at the top of the left, front edge of the camera is a second screw which gives lateral movement to the iris, making it possible to set this iris in any desired position.



WILLIAMSON—PARAGON CAMERA

A film-punch is provided which cuts a circular notch in the edge of the film, a mark much easier to find in the darkroom than a center punch. The intermittent is an improvement of the original Williamson claw-movement, with pins made to enter perforations easily and accurately, and operating without springs.

This camera was used by the Shackleton Antarctic Expedition, the 1922 Mt. Everest Expedition, the Indian Tour of the Prince of Wales, and has been supplied to both British and Japanese War Offices.

The camera fitted with Cooke lenses, F/3.1, 2-inch; F/3.1, 3-inch and F/4.5, 4-inch sells for £190 or £156 without lenses. Other models are made which sell from £25 to £95 and a high-speed model working up to 50 per second at £150 is also offered. A model similar to the Paragon, with one lens, two speeds, adjustable shutter; but with no dissolve, no turret, no auxiliary focusing-aperture, and so forth, is offered at £95. This is an excellent news-model.

The camera for general topical use should have a capacity of at least two hundred feet;

but there are often times when good pictures are lost which might have been obtained had a camera been at hand. For this reason, a small camera such as the Ica Kinamo or the Sept is very useful to carry at all times. The Ica is useful for full-length shots; but when circumstances are such that a most inconspicuous camera is desired, the Sept is good, as it can be held in the hands without a tripod and shielded by the arm or otherwise concealed. This camera is also very useful for naturalists in following bird-flights and similar scenes. One of these cameras forms a very useful accessory to any topical outfit.

The Ertel, Ernemann Sport, Universal, Wilart News and similar cameras are very good topical instruments*. For studio and professional use the cameras described in this chapter or similar instruments should be used. The capacity should be full four-hundred feet, with the usual accessories and effects.

*These cameras were described in "Kinematography for the Amateur."

(To be continued)



Franz Vöhl—Weimar

NICOLA PERSCHIED
FRANZ VÖHL



Honored by Dr. Emerson

WILFRED A. FRENCH, Ph.D.



R. P. H. EMERSON, B. A., M. B., the eminent English writer and authority on photography, has seemingly concluded his self-imposed and laudable task of investigating the merits of successful workers in various branches of photography, past and present, with a view to determine the most worthy one in each class. In his efforts to reach a definite conclusion, Dr. Emerson spared neither pains nor expense, and displayed a comprehension, sincerity and breadth worthy of admiration. In publishing the names of those whom he considered the most meritorious, Dr. Emerson emphasised the bestowal of the honor by giving a silver-medal. Their names are also to appear in his forthcoming history of photography. The list of the medalists is published elsewhere in this issue. In dealing with the problem, Dr. Emerson exercised absolute freedom of prejudice or personal feeling. This he manifested when he awarded the only silver-medal for portraits, and figure-subjects in the open, to Nicola Perscheid, of Berlin, Germany, to the disappointment of aspirants of other nationalities.

Although Nicola Perscheid was the subject of an appreciation so long ago as 1908, it may be fitting that a few remarks accompanying the recent, admirable portrait and photograph by an eminent compatriot, and which, as a remarkable coincidence, reached my desk at about the same time that I noticed the list of Dr. Emerson's awards in the *British Journal* of November 14, 1924. The photograph was sent entirely unsolicited, and as a respectful reminder that, on December three Nicola Perscheid would have reached his sixtieth birthday. It was in the year 1905 that, having won his first laurels, in Leipsic, Saxony, the subject of this sketch, left that city and settled in Berlin which proved to be a larger field for his ambition. His fame as a portraitist of supreme power and originality now began to extend throughout Europe and, it is safe to say that he has successfully maintained his reputation as the premier portrait-photographer of the old world. It is contended that a human portrait, whether a painting, etching or photograph, cannot be at once a work of art and a likeness—at least, unless ideal conditions of expression, marked individuality and close sympathy exist in both artist and sitter. On the other hand, a likeness true to life in contour, physical idiosyncrasies, expression—in short, an exact facial reproduction of the original—rarely fulfils the conditions that govern a work of art.

It is just here that Perscheid's genius finds brilliant and eloquent expression. In every great artistic performance, the element of technical excellence, though present, does not predominate. True art conceals art. It is so with a portrait by Perscheid. One is absorbed in contemplating the mastery of interpretation, its power, spontaneity and expressiveness, as a whole, to the exclusion of technical detail. One admires, too, the ability and the cleverness of the artist in bringing to the surface the soul of the sitter, his innermost, individual self. One is conscious, also, that the manner of presentation is characterised by force, directness, breadth, sincerity, distinction. This is the artist's individuality, and this is what distinguishes his work from that of his fellow-workers. Perscheid demonstrates his ability to gauge the personality of the sitter, bring out the good, the great that is in him—the patron is surely entitled to a portrait that represents him at his best and not at his worst—to seize the propitious moment and to impress it upon the sensitive plate. The sitter has the satisfaction to see himself as he appears to the members of his family and to his friends, and as he may be seen in his office, at his club or on the street. Perscheid has not been known to impart to his sitters a strained or startled expression, or to impress them with his own personality; nor do they assume a trait that is foreign to their nature. Indeed, they would not be inclined to do so, involuntarily or otherwise, for the atmosphere of the reception-room and *Atelier* is quietly impressive and soothing. That is the impression I gained when I visited his establishment in 1904 and, again, six years later. It reflected the personality of a man who was cultured, accomplished and intensely artistic. In his association with persons, he was discriminating. He cultivated the society of men of letters, artists, musicians, scientists and diplomats. Personally, he was a man of refined and distinguished appearance. I am assured by those who can judge, that Nicola Perscheid retains to this day the gifts and attributes that have contributed so largely to his success.

Although examples of his creative ability have graced these pages occasionally since 1906, none are more representative than the portraits of Kaulbach, Habermann, and Hirth, and several outdoor figure-subjects, which honored PHOTOGRAPHY of November, 1908. It is works like these which induced Dr. Emerson to honor Nicola Perscheid and place him in a class by himself—portraits, and figure-studies in the open.



AN EXCITING MOMENT

WILLIAM S. DAVIS

Winter-Opportunities Out-of-Doors

WILLIAM S. DAVIS



WHY do so many amateurs hibernate photographically during the winter-months? Is it due to a feeling that outdoor-scenes are unattractive at this season; that technical difficulties bar the way to success, or just to a strong preference for a warm room when the snow lies deep and the air is keen? A lack of desirable material certainly cannot stand as an excuse, for subjects are many and diversified. As to technical difficulties, every class of subjects present distinctive problems which must be solved before successful pictures can be made; but to the true amateur, this renders the work only more interesting, for is it not the case that the pleasure derived from doing anything worth-while is

about proportionate to the amount of thought and skill expended in its accomplishment? If the third suggested reason is the main or only one, it indicates a need to "turn over a new leaf" since tramps of a few miles at frequent intervals furnish just the fresh air and exercise needed to counteract the ill-effects of close rooms and the time spent at indoor-occupations.

To revert to the question of subjects: Winter-opportunities out-of-doors naturally suggest the open countryside—snow-covered fields, the woods where trees bend under their burden of soft snow and the highways with scattering houses on each side. These, however, are only a few of the many types of subjects one is likely to find, for there is such other material as the frozen streams



MONARCH OF THE WINTRY SHORE WILLIAM S. DAVIS

or lakes, the unfamiliar aspect of the seacoast with ice-coated rocks and beaches; moonlight-scenes of many kinds; snow-outlined plant-forms; icicles, and frost-patterns upon window-panes; to say nothing of various winter-occupations and sports, as, for example, logging; road-breaking after a storm; sleighing; skating and ice-boating. Perhaps in variety of material the average country-district has "a *leetle* the best of it" as compared with most cities; yet plenty of good subjects can be found in, or near, any city, not alone among the bits of scenery which exist in the parks but in such material as street-scenes during or just after a heavy snow-fall, night-effects under electric-lighting, unhackneyed aspects of buildings that possess distinctive sky-lines, architectural details and snow-covered roofs seen from an elevated viewpoint. Then, around a seaport there are always interesting waterfront-subjects; incoming ships iced-up after battling a winter-gale and tugs with their bows bucking drift-ice.

It is true that most camerists are not likely to see, in a single winter at least, all the different

classes of subjects named; but a few are quite enough to keep one comfortably busy; and, as a matter of fact, a higher standard of excellence in the work is more likely to be attained by concentrating one's attention upon subjects of similar general character until the technique of their rendition is mastered, instead of scattering activities over a very wide range simultaneously.

As most types of winter-subjects lend themselves admirably to pictorial requirements, we will touch upon the artistic side of our topic before referring to matters of photographic technique.

From the viewpoint of tonal effect, nearly all snow-scenes tend to divide themselves into two groups. In one, the most important tones are disposed in a few large masses, as in an open landscape where an unbroken field of snow constitutes the lightest area; the sky another area somewhat lower in key, and a thick clump of woods at some little distance forms a third, and much darker, area. Of course, minor gradations exist in each important area; but are not so pro-

nounced as to neutralise the general character of the broad divisions. In the other group, a great amount of fine detail breaks up the picture-space into a net-work of light and dark lines, so that comparatively little massing of flat tones is visible, a typical example being snow-covered tree-branches or bushes near the observer.

Naturally, the effect presented by any particular bit of material varies immensely with changes in the lighting. A diffused light—such as exists when the sky is overcast—reduces the number of minor modulations in a scene, the various tones being flattened to almost poster-like simplicity when they cover a large area. The general scale of contrast is likewise reduced. Illumination by direct sunshine increases the number of delicate gradations through the play of light over uneven surfaces. It also breaks up the large expanses of snow into patterns of light and halftone when there are at hand any objects capable of throwing cast-shadows. Such shadow-patterns must, of course, be accounted an integral part of the composition, the same as tangible objects. Whether the fleeting effects produced by sunshine are beneficial or not depends mainly upon the character of the material or its arrangement. Cast-shadows, for example, are often a valuable aid, not only because the patterns thus formed are of themselves beautiful but because the shadows can be utilised to balance tonally some dark mass in another part of the composition, as in our illustration “Amid White Fields”. Cast-shadows are, of course, most in evidence when projected either across the field of vision or toward the observer—in other words when the sun is either at one side or in front of the observer. Such lighting, particularly when the sun is low, emphasises the surface-texture of an expanse of snow or ice. The question of suitable lighting can only be answered after one has determined upon the particular quality or feature that it is desired to emphasise. This is exemplified in the case of such a subject as snow-covered tree-branches against a clear sky, which need direct sunshine upon them to bring out best the lace-like quality of the silvery snow-tracery and ensure adequate separation between the tone of the snow and that of the sky. Such lighting is not, however, essential if the material is presented against a fairly dark background; a diffused light then giving as good or better effects than intense sunshine.

Generally speaking, there is a desire to include too much material in one composition. When in picture-making you “Obey that impulse”—to quote a well-known catch-phrase—the result is a confused impression as to the purpose or meaning of the picture. One should choose a definite

objective, or feature, and then stick to the main point, like the boy who, as one of a group, was listening to a story about a farmer who went out to the barnyard to shoot a troublesome rat, and, when he fired upon the rodent, he accidentally set fire to a haystack near the barn. The hearers asked the story-teller various questions as to the outcome, such as “Did the barn burn down?”, “Was there a fire-engine at hand to put the fire out?”, etc.; but one boy stuck to the point by asking whether the farmer got the rat! The necessity of sticking to the main point need not be taken as meaning that only a very limited amount of material can be used, although such is easiest to manage. Open, extensive scenes may be pictorial in character if the large masses can be so grouped—by choice of viewpoint and lighting—as to produce proper balance and unity of interest. Material in which delicate detail plays an important part should be utilised as foreground-compositions, since this permits rendition of the details upon an effective scale, thereby focusing attention upon some definite “bit”, provided the background is free of distracting objects and provides suitable tonal contrast. The need of concentrating upon some single feature applies in record as well as in pictorial photography.

When figures, or other moving objects, are included, or made the principal feature, look well to their placement, not alone in the matter of position within the boundaries of the picture but, likewise, their relation to surrounding material. Thus, if one wishes to show a team and group of men breaking a path upon a country highway, this feature should be kept away from the exact center of the picture to avoid mechanically exact symmetry of space-division; but this alone will not ensure good composition if other objects lead the eye away from the principal feature, or an unsuitable background spoils the emphasis upon the figures. A good viewpoint, however, might show the road in perspective with open fields or other unobtrusive material in the distance; and, in this case, there is always some spot along the road upon which the eye rests unconsciously, and this constitutes the true focal-point of the composition. If the moving objects are caught when they occupy this strategic spot in the scene, the unity of interest will be enhanced instead of divided, as happens when figures or animals are unsuitably placed. The relative amount of space which a given object should be allowed to cover depends in a great degree upon the character of the surrounding material. If it is a case of landscape *with* figures one should remember that the figures are accessory to the scenic composition,



IN THE MOONLIGHT

WILLIAM S. DAVIS



AMID WHITE FIELDS

WILLIAM S. DAVIS

consequently they should not be so large as to dominate the picture, but serve rather as a point of accent. On the other hand, if a moving object is the *raison d'être* for making the exposure—as in our illustration entitled “An Exciting Moment”—it is advisable to have the object reasonably large in scale and placed in a simple setting which will not compete with it in interest. Familiarity with the sport or occupation depicted is generally the best guide to the most effective pose or movement to photograph.

The beauty and effectiveness of all pictures that show snow or ice depend to a great extent upon the proper rendition of tonal values, from the light-portions of sunlit snow to the shadow-sides of dark objects, when the latter are included. A picture that shows black tree-forms amid a blank white expanse is neither truthful nor beautiful as a rendering of a typical winter-landscape; for what we call white snow really shows countless subtle gradations of tone, from the faint details that indicate its surface-texture to the more strongly defined blue-violet shadows visible on sunny days. As for dark objects, they cannot appear absolutely black to the eye when illuminated from all sides by light reflected from the surrounding snow in addition to what falls directly upon them from the sky. However, many snow-scenes have a tendency to exhibit two widely different groups of tones; one being in

a high-key, the other in a low-key, and in consequence one of the main technical problems in winter-landscape work is to register simultaneously in the negative, and in a printable form, an adequate amount of the gradation which exists in the highlight and low-dark ends of the tone-scale. Another element of importance, when the sky is shown, is to preserve the effective difference in tone-values that the eye sees between the sky and the snow.

In nearly all open scenes, as well as those in which the upper portion of the composition is filled with dark objects, the lightest notes are found in the most strongly illuminated parts of the snow, the sky—whether a clear blue or a leaden-gray—being lower in tone. This adds immensely to the apparent luminosity of the snow, and when preserved in the photograph it enables the photographer to keep the highlight-accent of the composition where they logically belong in the typical snow-scene study. So, look well to the relative tone of the sky in the finished picture and try to strike the right pitch between white paper on the one hand and cyclonic darkness upon the other.

The right rendering of gradation and color-values is primarily a matter of using color-sensitive emulsions—either plates or films, suitable ray-filters when needed, and of giving sufficient exposure to record the gradations

in the darker parts. Orthochromatic double-coated plates, or films, are recommended as possessing the maximum latitude and greatest degree of freedom from halation. On dull or overcast days there is no need to use a ray-filter; but when the sun is shining and blue sky and violet-shadows are much in evidence, decidedly better results are obtained by capping the lens with a light-yellow filter, such as the well-known Ingento series "A" or one of the lighter grades

some cases to use a rather deep filter when a scene presents extreme contrasts, but anything like over-correction of color-values should be avoided as this depresses the blues and violets too much, causing the snow-shadows and sky to appear too dark and destroying atmospheric quality. The "K2" filter is as deep as should be used with orthochromatic emulsions for landscape-work. This increases the normal duration of the exposure about twelve times, when used



CLINGING SNOW

WILLIAM S. DAVIS

of the Wratten "K" series. A good filter will not only preserve the relative tonality of parts which show marked blue or violet-coloration; but it enables the sensitive-film to record a longer scale of contrast without loss of quality at either end when the subject is an average snow-scene. For it is generally the case that it is the lighter tones which reflect most distinctly the over-active blue and violet light-rays and it is the province of a yellow filter to act as a brake upon it, while those colors to which the film is less sensitive—such as yellowish or reddish-browns—predominate in the darker parts. Consequently, the filter practically shortens the tone-scale by reducing the difference in actinic activity of the light and dark ends. This action increases with the strength of the filter, making it desirable in

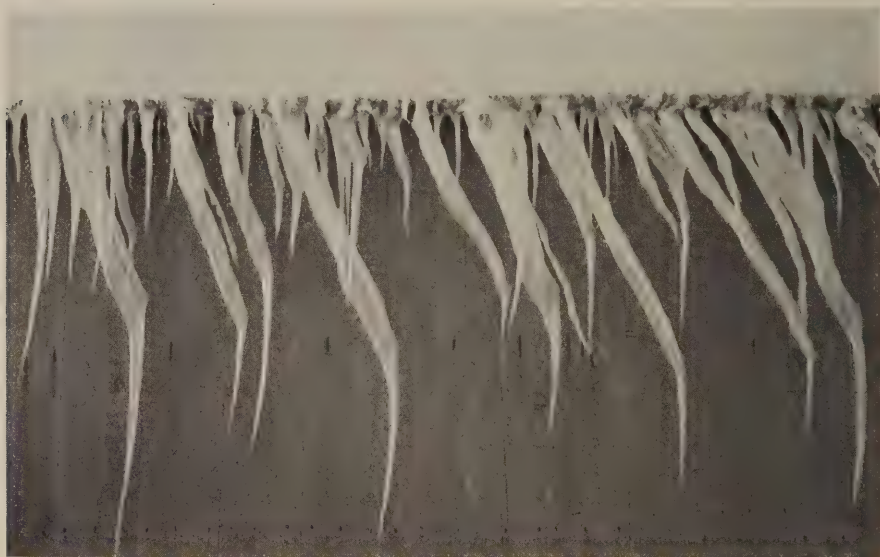
with the average orthochromatic plate or film. To realise the greatest benefit from the employment of a ray-filter, a full exposure should be allowed for the darker tones, letting the restraining action of the filter and latitude of the sensitive-film take care of any overexposure of the highlights.

Over-development, or the use of an excessively strong developer, should be avoided, and one may well apply the old maxim, "Expose for the shadows and develop to suit the highlights". If the time of exposure and development are properly adjusted to each other the shadow-parts of the image should show enough detail by the time the highlights have attained the right density in the negative to give the latter good printing-quality. The ideal negative is thin and

filled with gradation throughout; but not flatter than the character of the subject may require.

A tripod will often be needed to permit sufficient exposure being given when the subject contains much dark material, or when the light is weak. Employment of a lens-shade will prevent many a spoiled film by keeping off the front surface of the lens, extraneous light reflected from the snow and sky. It is also an aid in keeping the lens dry when exposures are made during a snow-storm. See that the lens is clean before starting out, and make the necessary adjustments in the field—such as changing the size of diaphragm or the setting of the shutter-speed—

bright"—i.e. the condition when direct rays of the sun are diffused by a film of haze or thin cloud over the sky—and the time between 10 A.M. and 2 P.M., the following exposures may be allowed when using rapid plates having a rated speed of about F/90 Wynne or 180 Watkins. *Average landscape*, with snow-covered foreground and bare trees or gray buildings something like fifty feet from the lens; 1/25 second, stop F/11 (U.S. No. 8), no filter. With a light ray-filter similar to the Ingento "A", from 1/5 to 1/2 second. This represents a greater allowance than the "factor" number of the filter would indicate; but it is safe to raise the factor number



WROUGHT BY FROST AND WIND

WILLIAM S. DAVIS

expeditiously to prevent the heat of the hand causing moisture to condense upon the lens or ray-filter, which would spoil the definition.

To mention definite figures for exposure is often rather dangerous to one's technical reputation, owing to varied interpretations which different people are apt to put upon the factors involved. However, I will risk naming a few exposures as an experimental basis for the beginner to work from; but in the long run I think it is best for the camerist to employ a good exposure-meter in a common-sense manner, which means taking the meter-readings as a guide for computation; but increasing or decreasing the indicated length of exposure for a given type of subject as may appear necessary after checking-up the results of test-exposures.

Assuming the light to be clear, or "cloudy-

when a scene presents good contrasts. *Very open scene*, with snow and sky covering most of the space and dark objects, if any, at a considerable distance or small in size: 1/50 second, stop F/11, no filter. With a filter of the type previously mentioned, 1/10 second. *Average landscape or street-scene photographed during a snow-storm*: 1/25 second, stop F/8 (U.S. No. 4), no filter. *Fairly open scene by the light of the moon*: twenty to forty minutes, stop F/8. For a thoroughly satisfactory night-effect, objects should form well-defined masses of tone and show an attractive outline against the sky. If one wishes to have the moon appear, the landscape-exposure should be made first when the moon is outside the field; for if included at this stage, it would be rendered as a long streak of light owing to the length of the exposure. How-

ever, after registering the landscape, the camera can be tilted until the moon is included in the spot desired, when an exposure of only fifteen to twenty *seconds* will be sufficient to impress its image upon the film. *Scenes by electric light* usually require somewhat less time than do moonlight-effects, the difference depending upon the intensity and number of lights present. Probably ten to fifteen minutes may be considered a fair average for well-lighted objects moderately near the lens. If possible, the nearest lights, particularly when the globes are of clear glass, should be kept outside the field, or some opaque object brought in line between the lens and light, to prevent the appearance of a bad halo around the light-globes. Very attractive effects are often encountered at twilight when the moonlight or artificial-light is re-enforced by the diffused daylight remaining in the sky. Under these conditions, exposures may range from a few seconds to a very few minutes.

All the exposures given should be cut in half if high-speed films or plates are employed, such for example as the Kodak Speed roll-film, Ansco Speedex, and others.

If rapidly moving objects are included, the exposure must be made with due regard for the speed at which the object is traveling across the field of vision, even though this may involve some risk of under-timing the film. To lessen

the risk of under-timing when the shutter must be used at a high speed, the ray-filter is naturally dispensed with, and a large lens-stop and extra rapid plates or films are used. Even without what is commonly regarded as a high-grade equipment, excellent snapshots of many kinds of winter-sport or work may be made by keeping within the limitations imposed by an ordinary lens-and-shutter equipment. This in practice means avoidance of close-up views of rapidly moving objects and working only when the light is good and the subject is seen amid light-toned surroundings. The ice-boat study here reproduced was obtained with a $2\frac{1}{4} \times 3\frac{1}{4}$ pocket-camera fitted with a rectilinear lens, the exposure being $1/100$ of a second with good sunshine upon the boat. However, I took care to keep at a fair distance from the subject to avoid blurring, thereby obtaining a small, but clear, image sharp enough to permit enlarging about one-half of the negative—which contained the important material—to 8×10 inches.

In bringing this article to a close I would like to call attention to the effectiveness of well-made stereographs as records of beautiful winter-scenes. Also to the pleasure that may be derived from good lantern-slides of snow-scenes, which when projected come nearer to reproducing the luminous quality of snow than it is possible for a print upon paper to do.



THE FLIRT

MARGARET HOUGH

HONORABLE MENTION—DOMESTIC PETS COMPETITION



Official Photograph, U. S. Army Air Service

Courtesy National Geographic Magazine

YOSEMITE FALLS VIEWED FROM AN AIRPLANE

LIEUT. A. W. STEVENS



EDITORIAL



The Valuation of Pictorial Photographs

THE modest prices obtained for pictorial photographs at public exhibitions seems to have created a situation which requires serious thought and early action. The dignity of the art demands it. The reputation of sincere and arduous workers requires it. The skill and time expended upon the creation of these works of art merit adequate compensation. Talent and thematic originality cannot pass unsuitably recognised. It is not enough that these expressions of creative talent, if not positive genius, are honored by art-authorities when they are displayed in halls consecrated to the fine arts. While being considered equally with painters and sculptors, pictorial workers in photography can afford to do no less than their fellow-artists, who scorn to place the results of their heart and brain in the category of mechanical reproductions. Their pride does not permit it.

But the way to ampler recognition and honor has been left open by the artists of the brush and the chisel, who have succumbed to the insidious influence of the modernist movement. These restless workers have left their traditional house and home—wandering far afield in search of new ideals. The void they have created can easily be filled by the art of pictorial photography—but only by concerted, intelligent action. The quality of photo-pictorial work leaves nothing to be desired. Its originality and beauty are generously acknowledged by broad-minded artists, although the sincerity of this admission by other artists may be open to doubt. While appearing to concede the high position attained by pictorial photography in the realm of art, some of the ultra-modern fanatics believe that its present success is only temporary and that, as soon as the new art shall have been firmly established, pictorial photography will be relegated to a rear-seat in the amphitheater of art. But such arrogance will remain unheeded; for photo-pictorialism has come to stay—provided that wise counsel with regard to sales-prices of pictorial prints shall prevail. The truth is that many worthy photo-pictorial workers have been too modest—reluctant to range themselves with painters and etchers in

the valuation of their productions. They should know the advantages which a skilfully prepared photographic print has over the present-day oil-painting or watercolor. In originality and beauty of conception, alone, the artistic photograph is superior to the average modern painting, and immeasurably beyond the unintelligible caprice of the ultra-modern devotee. According to the latest doctrine in modern art, the picture must tell no story; its motive must not be obvious. Its appeal—if appeal it have—is made only to the initiated or to peculiarly constructed vision.

Pictorial photography is of a different sort. Being a monochrome, the photo-pictorial print excels in line and form, gradation and tone. Composition, which the ultra-modern painter studiously eschews, is one of its pre-eminent characteristics. Instead of doubt—if not actual revulsion—which is experienced by the beholder of a futuristic work, quick comprehension, joy, admiration animate the sympathetic observer of a fine pictorial photograph. Another distinct superiority of a properly made art-photograph is its durability as compared with that of the present-day oil-painting or watercolor. Well-known followers of the new art—that is to be—freely admit that their pigments and colors are fugitive, and capable of changing even in one day. Whatever the cause of the tendency to change its physical appearance, the modern painting cannot be a permanent source of enjoyment to its owner; and, what is more, is the grave possibility of viewing the matter from an ethical standpoint. Although virtually no painter can guarantee the permanence of his work in colors, it is sad to think that the purchaser is ignorant of the fate that awaits his picture.

Although the watercolorist finds it well-nigh impossible to obtain a paper-base free of deleterious chemicals, the photographer is distinctly favored. The standard printing-mediums, properly used, are sure to yield a reasonably permanent image—one that far exceeds the life of a modern painting. The aim of the pictorial worker should be to secure the interest, confidence and respect of the public, always remembering that a discriminating public will take more notice of art-photographs that bear a high sales-price than those that bear low ones.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are not regular subscribers will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are already subscribers will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for two years thereafter.

Awards—Advanced Competition

Domestic Pets

Closed November 30, 1924

First Prize: Franklin I. Jordan.

Second Prize: William F. Anderson.

Third Prize: Eugene M. Smith.

Honorable Mention: Margaret Hough; R. M. Weller; S. Beng Guatt; A. L. Junken; W. Rutherford; W. E. Zeigler; Wm. S. Davis; Hiromu Kira; Walter H. Reuleaux; Newton Wright; A. E. Rutenbeck; A. R. Brown; Cornelia Clark; John O. Scudder; Elizabeth B. Wotkyns.

Subjects for Competition—1925

"My Home." Closes January 31.

"Miscellaneous." Closes February 28.

"Indoor-Genres." Closes March 31.

"Table-Top Photography." Closes April 30.

"Artificial Light Photographs." Closes May 31.

"Miscellaneous." Closes June 30.

"Front-Cover Illustrations." Closes July 31.

"Real Sunrise and Sunset Pictures." August 31.

"Wild and Cultivated Trees." Closes September 30.

"Miscellaneous." Closes October 31.

"Lakes, Rivers and Brooks." Closes November 30.

"Interesting People and Places." Closes Dec. 31.

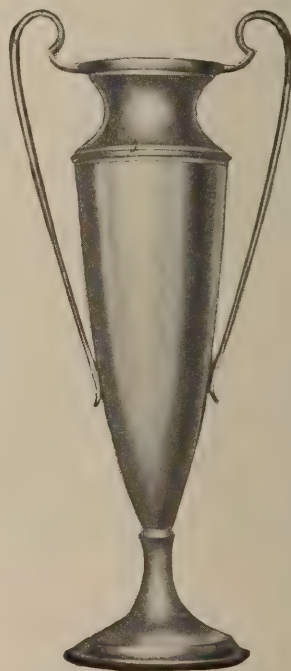


Photo-Era Prize-Cup



PLAYMATES

FIRST PRIZE—DOMESTIC PETS

FRANKLIN I. JORDAN



DON

WILLIAM F. ANDERSON

SECOND PRIZE—DOMESTIC PETS

Advanced Competition

GRADUALLY, the virtues and accomplishments of the unassuming, versatile Franklin I. Jordan, of the Union Camera Club, Boston, are being revealed. Successful photo-pictorialist, lecturer on art, model club-member; exemplary citizen; ideal paterfamilias; lover of his home; idol of his family; expert printer; popular Shriner—but I am losing sight of his picture! "Playmates" is a fine example of Mr. Jordan's large collection of genre-pieces, in which the artist manifests his intense love of children and their domestic pets. It is a composition in which simplicity, unity, harmony and balance are happily blended. The technique is above reproach. The well-ordered design appears to follow the triangular form.

Data: Made in the house February, 1924; 2 P.M.; sun reflected from snow into a light room; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex; Carl Zeiss Ic, 15 cm., lens; stop, F/4.5; $\frac{1}{5}$ second; Eastman Standard Orthochrom; tanked in Rytol; enlarged on Artura Carbon Black.

"Don" looks fetching with his head cocked to one side. The background was well chosen for it throws the figure of the dog into strong relief and adds greatly to the pictorial interest of the picture. Unfortunately,

"Don" is placed too far to the left—probably to avoid the center. In the present instance, however, more space at the left would have been better inasmuch as "Don's" head is turned in that direction, and the other side is sufficiently taken care of (occupied) by the animal's shadow.

Data: July, 1925, 2 P.M.; bright sun; No. 4 Cart-ridge Kodak; $7\frac{1}{4}$ -inch R. R. lens; used at F/8; $\frac{1}{50}$ second; Kodak N. C. Film; M. Q.; enlarged and redeveloped on Defender Velours Black Buff D. W.

"Mother and her Ducklings" is an eminently successful contribution to this competition. The feeder and her charges share in the same interest. The element of unity is finely expressed and the technique meets every requirement. There could easily be numerous disconcerting objects, but none is in evidence. The composition is admirable in every respect.

Data: September, 10 A.M.; bright light; 5×7 Premo Camera; R. R. lens; stop, U. S. 8; $\frac{1}{25}$ second; Premo Film Pack; tanked in pyro; enlarged from portion of negative on Enlarging Argo, Contrast, Smooth, Mat.

WILFRED A. FRENCH.

Take everybody's advice—then use your own.

Scotch Proverb.



MOTHER AND HER DUCKLINGS

EUGENE M. SMITH

THIRD PRIZE—DOMESTIC PETS

Why, When and Where to Use a Short-Focus Photographic Lens

READERS of photographic magazines have doubtless been impressed with the phrase, "Always use the lens with the longest focus the case will permit." This advice is correct in theory and should be followed when possible. Although not generally known, it is common practice in studios where illustrating catalogs is a specialty, to use a telephoto-lens to photograph small objects, such as medals, mechanical pieces, etc., because of the better perspective that can often be obtained by this means. But there are many cases where a short-focus lens will give better results than a long-focus one and where it is possible to obtain exactly the same perspective in both. Many a beginner will be surprised to learn that a camera pointed in one direction, and remaining in the same position in a number of views made with lenses of different focal lengths, the portion of the view common to each will have the same perspective. For example, from the end of a street having twenty houses we wish to make a view showing the houses in linear perspective. We have a 5 x 7 camera with a lens of 12-inch focus and another lens of 6-inch focus. Using first, the 12-inch lens, and counting the houses included in the view we find there are ten and the remaining ten are not in it. If we replace the 12-inch lens with the 6-inch one,

taking care not to move the camera while shortening the bellows, and make another view, we will find fifteen houses on the plate, all much smaller than on the first. If we mask the five nearest houses on the 6-inch plate so that there remain only ten, as in the first plate, and enlarge this part to the size of the 5 x 7 plate, the enlargement, when placed alongside a contact proof of the first negative, will be found to be exactly alike, the only difference being that the one made with the 6-inch lens contains more houses and the nearest ones appear too big compared with the distant ones. In other words, the foreshortening is exaggerated and the perspective is different from what the eye is accustomed to. Now to examine an important detail: with the 12-inch lens it will be necessary to use an F/44 diaphragm so as to have the first and the tenth houses perfectly sharp; if we use the 6-inch lens we can obtain the same sharpness with an F/16 diaphragm, because the shorter the focal distance the nearer the point of infinity. Consequently, if we have to focus a subject which contains both near and distant objects and moving objects that require a short exposure, a short-focus lens will permit us to use a larger diaphragm and give sharpness in all planes. Although it seems paradoxical, under certain conditions an enlargement of a 5 x 7 view to 10 x 14 may be much sharper than a 10 x 14 made direct. A trial with a good negative will prove this to be true.—*Photographie Moderne*.



SELECTED HONORABLE MENTION PICTURES—DOMESTIC PETS

- 1 *Please*
Newton Wright
- 2 *Susan Cottontail*
John O. Scudder

- 3 *Did Someone Call?*
W. E. Ziegler
- 4 *Kitty—Me-ow*
Cornelia Clarke

- 5 *Bobs*
R. M. Weller
- 6 *Trotty*
William S. Davis



SUBJECT FOR NEXT COMPETITION

ADVANCED WORKERS



Advanced Competition—Indoor-Genres

Closes March 31, 1925

LET every camerist attune himself to the human and artistic values in the very simplest of subjects, and he will find that in this manner the masterpieces of old were reproduced. It seems to me that many times we seek to do the big things when by training, natural aptitude and equipment we are better fitted to make a success of the small things. Each worker should stand upon his own photographic feet and, regardless of the achievements of others, make his own place in photography. The jury passes upon each picture solely on account of its merit, and without any consideration of the name or reputation of the maker. We welcome the newcomer as heartily as we greet the work of old friends. Hence, let no camerist hesitate to hold his head up with the best of them and thus grow in photographic strength by honest effort and originality. Few men or women have achieved success without first meeting squarely the problems of life, and pictorial fame is won on the same basis by meeting and solving the problems of photography.

There is always a decided interest in the Indoor-Genre Competition. A number of factors contribute to this end, and not the least among these is the human element involved. This is especially true if a pretty girl happens to be the subject. However, no matter how old or how young the model may be, there is much of beauty, interest and value to be found in the making of a good indoor-genre. This year it is to be hoped that there will be greater emphasis placed on making genres of the so-called humdrum activities of life and fewer of models quietly reading. The attempt should be made to bring out the glory and beauty that there is in honest toil. Surely the haymaker in the barn, the blacksmith at the forge, the housewife at the door, the gardener among his greenhouse flowers, and similar themes, may be made into attractive indoor-genres.

Genre-photography, whether indoor or outdoor, is one of the most difficult branches of photography to master. The human element involved is no small factor in the success or failure of the worker. On the other hand, there is much satisfaction in being able to solve the technical, artistic and human equations that follow one another in quick succession. During the winter, there are innumerable opportunities to produce delightful indoor-genres of home-life, family and friends. At the outset, remember that the value and charm of a genre is its fidelity to fact. It *must* ring true to be convincing.

In making indoor-genres, daylight, artificial light and flashlight-apparatus may be used. However, the least expensive illuminants at present are daylight, gas and electric-light. A cloudy-bright day, between the hours of 10 A.M. and 3 P.M. during the months of February and March is particularly good for indoor-genre photography. There being no sun to cast heavy shadows or annoy the subject by its brilliancy, the camerist may work with comparative freedom. He will need virtually no diffusing-screens; and a sheet, placed judiciously to reflect the light where it is needed,

should complete the necessary preparations. Of course, care must be taken to expose correctly and to use the plate or film best adapted to do this sort of work. This remark applies equally well to indoor-genres made by artificial light. A nitrogen-filled electric-lamp will produce a strong actinic light that will enable the worker to obtain excellent results at night. However, owing to the very intensity of the illumination, various forms of light-diffusion must be evolved in order to avoid extremely harsh contrasts and unpleasant facial expressions. Care should be taken to make sure that the electric wiring of the house and that the "service" electric current will permit such a powerful lamp to be used without danger of blowing out the fuses and otherwise injuring the wiring in the house, or, possibly, the operator. In most cases, the use of a nitrogen-filled electric-lamp will cause no trouble, and it is by far the most effective illuminant because there is no smoke, noise or dust. Two or more of these lamps should answer all requirements.

Then, we have several excellent types of electric home-portrait lamps which use a special type of carbon in an arc, and these give out an intense though comparatively soft actinic light. There are also several excellent portrait-flashlamps on the market to-day that may be used with a minimum of danger, smoke and dust. Some remarkable improvements have been made within the last year, and the camerist who expects to do much of this work should obtain all available information from the manufacturers to ensure getting an equipment that will meet his needs. Obviously, these outfits are more expensive than nitrogen-filled electric-lamps; but if the camerist can afford one of these outfits, he should be able to produce excellent results. Of course, the use of gas does not enable the worker to place the illumination where it will do the most good. However, a little originality will work wonders, and even a gas reading-lamp may be made to serve the purpose. Those who demur at the use of flashpowder should remember that the modern flashlight-outfit, with its flashbag, virtually does away with the smoke-nuisance; and, at the same time, so muffles the noise of the explosion that the subject is not perturbed in the least. If the worker will use flashpowder according to directions, and with care, there is no more danger to himself or to his subject than there is in motoring, canoeing or swimming. Of course, he who takes risks must pay the price of foolhardiness. Flashlights at night, or during the day when the light is weak, arrest motion and permit the use of low-speed lenses that are fitted to cameras of moderate cost.

The making of indoor-genres demands an unusual degree of tact, artistic perception and a sense of humor. If the camerist attempts to succeed by assuming a dictatorial manner, or by forcing his models to do things that are uncongenial or unnatural to them, he will fail to make the sort of indoor-genres that the jury will approve. I cannot emphasise too strongly the necessity to make the picture conform to the characteristics of the subject. Moreover, do not desert fact just to obtain an unusual or startling effect.

A. H. BEARDSLEY.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$5.00.
Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of not more than *two years'* practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous

Closed November 30, 1924

First Prize: J. M. Osaki.

Second Prize: Irving Sparks.

Honorable Mention: Paul L. Miller; C. A. Pierce; S. Horino; John H. Kemp; Henry A. Lyner; Margaret I. Parsons.

Many Women are among the Beginners

NO DOUBT some of our readers have been watching the steadily increasing number of women who are taking an active interest in our competitions. This is particularly noticeable in the recent Beginners' Competitions. Needless to say, I am very glad that so many women are entering pictures and I hope that more will feel that our competitions are not cold-blooded affairs but rather a friendly consideration of each picture submitted and a sincere desire to help the one who made it to get more out of photography. Let me add that I have in mind several women who are making splendid progress and who will soon make competitors in the Advanced Competition realise that from the ranks of the Beginners come the pictorial leaders of tomorrow. Incidentally, I repeat here that the beginner is the foundation for the future growth of photography. In a few short years, those who now hold the pictorial honors of the world will pass on; and from such competitions as this one must come the incentive to beginners to keep on and win photographic success.

It has been my privilege and pleasure to receive many letters from women-beginners in all parts of the country and overseas. In most of these letters I believe that I detect a slight note of dread and even fear that to submit pictures to this competition is to court harsh criticism and virtual discouragement. Whether this feeling is due to a natural shrinking from the cold eye of the critic or whether competitions in general have received some unpleasant notoriety, I am unable to say. At any rate, I wish to take this opportunity to assure my readers that insofar as PHOTO-ERA competitions are concerned, they need have no fear of harsh treatment at the hands of the jury or of the editor and publisher.

To be sure, even the most friendly criticism may not be especially pleasing. I know what it is to do one's very best and then be criticised for it. However, if it be understood that only kindness and a sincere desire to help governs the criticism, then the least that we can do is to accept it with a smile. I mention this particularly for I know that some of the women-beginners are a bit sensitive. They try very hard not to show it and to "play the game"; but, at times, it is difficult to have one's best effort relegated to the background. However, we try to build up rather than tear to pieces in our criticisms; and many, I am glad to say, have discovered our point of approach and send in their pictures with a light heart.

No doubt it will interest my readers to know that a number of women who have been sending in prints are doing very well by selling pictures and doing part-time photographic work. The fact is that in matters



EARLY MORNING AT THE PARK

J. M. OSAKI

FIRST PRIZE—BEGINNERS' COMPETITION

of taste they excel the men. I refer particularly to greeting-cards, place-cards and menu-cards. Then, too, there are many little ways that clever women devise to use prints of flowers, children, pets and interior-views. All this work—much of it done in spare time—adds not a little to the income of the individual or of the family. I am not so sure that many women-beginners who now send in prints to this competition will not eventually surpass the men in those branches of photographic work where a woman's daintiness and good taste count heavily.

All of which brings me to the point of this little article, namely that those of my women-readers who have merely *read*, and not *done* any real photographic work, will do well to begin now to enter prints in this competition. Really, it is not a tremendous task. What is more, there is real pleasure in store. Every woman likes to do something well and receive the admiration of others. Photography offers a splendid opportunity to every woman to express all her latent love of the beautiful and the artistic. This department is ready to serve. We ask our readers to give us the opportunity to prove it.

A. H. BEARDSLEY.

Beginners' Competition

J. M. OSAKI's "Early Morning in the Park" is a delight to the eye. It is an effort of which the advanced worker would be proud, and shows that frequently, in our junior competition—those with a practical camera-experience of less than two years—workers manifest an artistic and expressive ability of a high order. Mr. Osaki is eminently gifted with artistic vision and a love of nature. About the only objection the critical observer may have to this composition is the too brightly lighted path which divides the picture into two distinct parts. An examination of a superb small (contact) print of one-half of the original, stereoscopic negative shows the path to be in shadow, with only a few shafts of sunlight crossing it. The fault therefore lies with the inadequately prepared enlargement entered in the competition and used for reproduction. This lack of attention on the photographer's part has resulted in an untruthful and, at the same time, detrimental representation of the path, which plays a very important part in the composition of this picture; although, to be sure, the grassy bank in the lower left corner—inky black in the accompanying original contact print—assumes an agreeably dark-gray tone



DOLORES

IRVING SPARKS

SECOND PRIZE—BEGINNERS' COMPETITION

in the enlarged print. The original stereoscopic negative certainly deserves a skilfully prepared enlargement, for it shows the worker to be very successful in this branch of photography.

Data: Made at Los Angeles, Cal.; February 21, 1924; bright sunlight; R. B. Telescopic Graflex; 6-inch Cooke Anastigmat F/4.5; used at F/8; 1/40 second; Premo Film Pack; Eastman No. 2 Tank Developer; made from part of $3\frac{1}{4} \times 4\frac{1}{4}$ negative; Wollensak, F/4-stop used near F/6; Wellington Bromide; developed with metol-hydro.

"Dolores" is a very creditable performance for a beginner. A pleasing pose, figure admirably placed, dress of an artistic design, low-toned and pattern not too conspicuous, and good photography. The whole figure, even to the hat with its bright touch of white, and not forgetting the appropriate, plain background, spells simplicity and harmony. My personal compliments to the promising artist, Irving Sparks!

Data: Made at Baltimore, Maryland; August 1924; Ica camera ($2\frac{1}{4} \times 3\frac{1}{4}$); $4\frac{1}{4}$ -inch Dominar lens F/4.5; used at F/4.5 with diffusing-disc; illumination—two 300-watt lamps; 1 second; Eastman roll-film; Eastman formula for development; enlarged on P. M. C. Mat Bromide No. 6.

WILFRED A. FRENCH.

Correction is good when administered in time.

Danish Proverb.

A Chinaman's Application for Photographic Position at a Dealer's

AN advertisement inserted in one of the London papers brought a well-known photographic firm a very fine specimen of Chinese-English. The letter was as follows: "I am (name) and my lodge (address) for a time.

"It is for my personal benefit that I write for a position in your honorable firm.

"I have a flexible brain that will adapt itself to your business, and in consequence bring good efforts to your honorable selves.

"My education was impressed upon me in the Peking University, in which place I graduated Number One. I can drive a typewriter with good noise, and my English is great.

"My references are of the good, and should you hope to see me they will be read by you with great pleasure.

"My last job has left from me, for the good reason that the large man is dead. It was on account of no fault of mine.

"So, Honorable Sirs, what about it?

"If I can be of use to you, I will arrive on some date that you should guess."—Exchange.

[We wonder whether the applicant was successful. —EDITOR.]



OUR CONTRIBUTING CRITICS



NATURE'S UPHOLSTERY

THEODORE, WESTERFIELD

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

THE effort "Nature's Upholstery" reveals on the part of its maker a considerable knowledge of the fundamentals of picture-making. The principal object of interest is well placed, the background is all that could be desired, and a pleasing perspective is afforded. The use of a suitable lens at a proper stop-opening and for a sufficient time to render good tonal-values is evident. There is no excess of wearisome detail nor any distracting features, and all the elements make for simplicity and unity.

However, as this is essentially a snow-picture, it must be judged from that stand-point, bearing in mind the essentials of illumination and shadow-effect. The view-point, doubtless, was the best available, but should have been supported by improved lighting and increased exposure. The morning-light has thrown the shadows behind the benches, where they are almost lost. An evening lighting, with much-increased exposure, would have cast long shadows in front, where they would have given leading lines and rendered the foreground in a desirably lower tone, and would have added brilliancy, contrast and tone-gradation by its *contre-jour* effect. Thus he would have complied with the basic law that environment—surrounding conditions or forces which influence or modify—must support the theme in every possible way.

The title should not be taken too seriously lest its incongruity becomes too manifest. Consider it rather as a fantasy—a conceit which makes no demands on our imaginative faculties. Then the picture assumes its true value—a sentiment of the moment.

J. W. ADAIR.



THE beauty of snow-scenes in photography consists in the infinitely delicate rendition of gradations that hover close to pure white. Necessarily in a high key, they need very careful exposure. Except in the case of happy accidents, this correct exposure can be obtained only by calculating the actinic strength of the light and the speed of the emulsion. Although the Autocrat of the camera-world does not mention the speed of his films, you can learn their speed by consulting Burroughs-Welcome, and you can get a Watkins meter which will give you the actinic value of the light. Thus equipped, the photographer might have avoided the *gaucherie* of this picture: there is almost no gradation in the highlights; the snow in front of the chairs is dark, and that behind the chairs is light—same snow!

The composition is not pleasing: an awkward row of chairs, with a tree apparently growing out of the back of one of them. Whatever may be on the left edge of the picture, it must be off at an enormous distance, judging from the perspective. Doubtless, this is the result of standing too near the seats and using a lens of too short a focus. Doubtless, also, the chairs are photographed from too low a point of view; they seem



THE ROAD

BESSIE O. JOHNSON

YOUR CRITICISM IS INVITED

preposterously high, and one wonders where a sitter would put his feet in such chairs. The technique is bad and the composition faulty. Query, was the scene worth a plate or a film, any how?

E. L. C. MORSE.



INASMUCH as Mr. Westerfeld has chosen for his subject, "Nature's Upholstery", the chief point of interest is in the mantle of snow which covers the seats. The view-point is excellent for pictorial effect, displaying nicely, as it does, the structure of lines in the seat-arrangement; and the lines of the trees in the background running counter to the picture-subject give an added touch of distinction. But though the subject has been well placed in the picture-space, and the composition well handled, much has been lost in pleasing effect through incorrect exposure and treatment. The conditions of lighting were evidently good; but the print lacks the snap, sparkle and brilliance of a well-timed snow-picture. The oft-neglected photographic axiom, "Expose for the tones most needed", might have been a useful guide in this instance.

WM. F. MURDEN.

"PERFECT nature, unalloyed" I concluded, and I was preparing to find new diversion more charitable than the criticising of good photography, when it flashed through my mind that even nature is not without its blemishes; for are there not spots on the surface of the sun and craters on the moon? Again I studied the picture and this time, influenced no doubt by the very comfort of my position in a well-fashioned plush chair, I found a fault; but, alas! not with the wonders of nature, but with the photographer. Now when I see a bench, and especially a park-bench, I am tempted to settle upon it; but somehow this bench, even with its ermine upholstery, does not have this attraction. Instinctively I go to turn up my collar and I know that if I was passing the spot, I would hurry along; for everything seems gray and cold. But how could this situation be remedied? Could the camerist not have waited until the sun was higher in the heavens? As a consequence, the background would have been brought into more bold relief and the bench—ah, the bench!—if only a single sunbeam danced along its length, it would hold for me such inducement that I would sink into its downy upholstery until ordered along by some blue-coated upholder of the law.

IRVING W. HALSTEAD.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



THE results of the Kalosat Photographic Competition, referred to elsewhere in this issue, are very interesting in that they show the capabilities of the Kalosat lens as used under varying conditions, and also from clear to soft definition. What must be a particular source of pride and satisfaction to the manufacturers is the circumstance that the participants in the contest were serious workers some of whom are well-known pictorialists. This competition is only a suggestion to what extent the Kalosat lenses are being used by amateurs and professionals also.

Although "The Shadow," page 67, failed to win one of the three prizes, it is an engaging subject, and amusing and convincing in its story-telling quality. The performer is admirably placed in the enclosure and the result of her digital skill is adequately assertive. The photography is uniformly excellent. Furthermore, no illustration in this issue is better suited to the requirements of the front-cover. Unfortunately, no data were supplied for the Kalosat series of pictures.

"The County National Bank", frontispiece, is one of the best photographs of this kind that I have been privileged to see. Admirably composed—excepting the long strip of window near the left margin—well-lighted, with the beautiful columns emphasising the height of the interior and the scattered figures spontaneously engaged, the picture merits the distinction of being pronounced the finest achievement in the competition. Perhaps, in another print, the seriously objectionable vertical highlight, already mentioned, will have disappeared.

The bronze figure of an elk—a monument erected by the Elks fraternity, on the Mohawk Trail, page 64, is known to every traveler along this popular highway in northwestern Massachusetts. From the spot where the monument stands, a fine view is obtained of the surrounding country. This is indicated in Mr. Hahn's photograph.

"The Dancer", page 65, attracts by the grace of pose, suitably high key, and modesty of attire. If the artist intended to simulate the effect of marble, he eminently succeeded.

The landscape by Frank O'Neil, page 66, is admirable in proportions. The manner of managing the reflected sky displays fine artistic judgment. Being the foreground, the reflections yield in brightness to the beautiful sky above—a nice adjustment which only too often is neglected.

The place of highest importance, in the charming group on page 68, has been rightly allotted to the doll. The picture represents a delightful phase of child-life and, as such, it should not be considered too seriously. The spirit of the theme has been interpreted with uncommon skill, and the photography could not be bettered. It is a picture of the home, and the setting is appropriate and restful.

Our faithful contributor from overseas, J. Herbert Saunders, shows the versatility of his joyous specialty, picturing scenes of happy childhood, in "Dorothy". The little maiden seems to be engaged in adjusting the figured apron—an act which must cause some amusement and her own roguish smile. The technique, including the tonal quality, is praiseworthy.

The celestial photographs which accompany the present chapter of Professor Stokley's instructive story of star-land are truly awe-inspiring. As the results of the science of astronomical photography, they border on the phenomenal. Our readers would seem to owe a debt of gratitude to the author of these illuminating articles, which are being enjoyed largely for his clear and felicitous style.

"Power", by N. Courtney Owen, refers evidently to the railroad-train which may be seen skirting the shore of the "moonlit" lake. The smoke from the engine very obligingly obscures a part of the lunar reflection, of which the artist rightly took advantage.

The illustrations of the different types of "kiné" cameras, used by amateur workers, will be welcomed by those of our readers who know them only by their trade-names.

How the famous German portraitist, Nicola Perscheid, came to be photographed by Franz Völzl, of the classical city of Weimar (Goethe, Schiller, Liszt), is something I am unable to explain at the present time. Völzl, himself, is a portraitist of high rank and, evidently, a friend of the sitter. That the portrait was made *con amore*, seems conclusive from the letter received from the Weimar artist. The expression of sadness—developed, perhaps, since the World War—seems foreign to the habitually serious though not discontented aspect of the man, as I knew him in 1904 and, later, in 1910. He was always deeply engrossed in his work, concentrating his efforts on the all-absorbing task of making characteristic and artistic portraits of his sitters. He never slighted his work, in any way, and never produced a portrait that did not have his unqualified approval. He was a supreme technician in every department of the art. His brother-artist, Völzl, seems to have risen to the demands of the situation to produce an honest, sincere likeness of his distinguished friend. The beautiful, diffused lighting of the head, the finely graded quality of tone, and the delicate modeling of the features are evidence of the skill of a master craftsman.

The opportunities offered by King Winter are but partly appreciated by the average camerist. William S. Davis, from his permanent seashore-home on Long Island, is busily observing the ever-changing moods of nature at all seasons of the year. The studies which illustrate his present article are characteristic of his ability as a photo-pictorialist. The finest of the present series is "In the Moonlight", page 89. The rendering of the subtle, mysterious quality of moonlight is a technical achievement of the highest order. As a pictorial composition, this nocturnal landscape merits high praise. The critical beholder cannot but admire the serene aspect of the scene, the prevailing peace, harmony and repose, and the total absence of a discordant note. The original print was honored by being hung in exhibitions in Los Angeles, New York, Boston, Bangor and Pennsylvania State College.

Data: Made at Orient, Long Island, N. Y.; 7.45 to 8.15 P.M. (30 minutes); moon at one side; $3\frac{1}{4} \times 4\frac{1}{4}$ plate camera; Anastigmat, at stop F/6.3; Roebuck Double-Coated Ortho. plate; pyro; enlargement on P. M. C. Bromide No. 2.

The extremely rigid arrangement of objects, animate and inanimate, by Margaret Hough, page 93, is equalised by the appealing quality of the trio in the basket. Fortunately, too, the kitten at either side of the puppy is "dark-complexioned", otherwise the balance of this symmetrical composition would be disturbed. Technically good. It's a picture designed to please the little ones; and why shouldn't they derive some benefit from the copy of PHOTO-ERA that lies on the family-table?

Data: In the shade; October 12, 1.30 P.M.; Planatic (5 x 7) series III; short bulb-exposure; Eastman film; No. 2 developer; print Azo F No. 2.

The view of Yosemite Falls printed by courtesy of the *National Geographic Magazine*, page 94, is an interesting and instructive topographical study of that famous spot. It may be well for the beholder to compare this aerial photograph with any good terrestrial one of this subject and note the difference in topographical appearance.

Honorable Mention

In "Please" of group, page 100, the camerist succeeded well in choosing a background which would throw the figure of his pet-dog into strong relief. The resulting contrast produces a high degree of realism that is the very antithesis to an artistic treatment of the subject. Obviously, the definition is very clear and the background uniformly dark, without any disconcerting accessories or objects.

Data: Rear of the house; September, 1924; 2 P.M.; cloudy, bright; Ansco Speedex $2\frac{1}{4} \times 3\frac{1}{4}$; $3\frac{1}{4}$ -inch Goerz Dagor; at F/6.8; 1/25 second; Kodak roll-film; pyro, tank; enl. on Eastman Bromide "Old Master"; Nepera Solution.

"Brer" Rabbit (No. 2) is thinking. What he did immediately after the exposure is left to the fertile imagination of the beholder. And the fate of the carrot? Was Bunny interrupted in his anticipated feast, or was his favorite morsel merely placed there as an inducement to "look pleasant"?

There is no clue to any of these vital questions, for the highly important data are lacking. The group is a simple and pleasing composition and an admirable bit of photography.

The humor of Mr. Ziegler's caprice, No. 3, is convincing and contagious. At first glance, it looks as if Bossie's head were protruding from an opening in the barn-door which had contracted leaving the beholder in doubt as to the animal's eventual fate. An inspection of the picture, however, explains the attempted Houdini trick; for Bossie is seen to have advanced a little from the open door, towards the right, and to be turning its head abruptly in the opposite direction—the observer's left, and to be inquiring if anyone had called it. Mr. Ziegler shows himself to be a clever photographer-humorist, lending spice to the page. The spacing to this unique comic is capital and the photography eminently adequate. Data: August, 1924; cloudy; B. & L. Ic Tessar; 6-inch focus; stop, F/5.6; 1/50 second; Graflex roll-film; Elon-Pyro; enl. on Wellington Thick Rough.

Cornelia Clarke adds variety to the competition by entering her speaking cat. Miss Clarke has spent much time traveling in Europe, in countries where she utilised her knowledge of—but I am not at liberty to reveal the extent of her linguistic accomplishments. What her domestic pet is capable of, I am unable to say; but, for the present, it seems to be limited to an expressive "mee-ow". Pussie's picture appears to be excellent, although the receding planes may be a trifle abrupt.

"Bobs" (No. 5) had dropped into a comfortable pose which his mistress recognised as one worthy to be perpetuated by the camera. The setting, too, was appropriate and, with the light falling at the proper angle, Mrs. Weller proceeded to exercise, successfully, her artistic skill, after having satisfied herself that no disturbing objects or influences were present.

Data: May, 4 P.M.; sunny; $3\frac{1}{4} \times 4\frac{1}{4}$ Reflex Camera; $5\frac{3}{4}$ -inch Aldis lens; stop, F/4.5; 1/60 second; film-pack; pyro-soda; bromide enlargement.

"Trotty", is by W. S. Davis whose sterling interpretive ability is exemplified in the forefront of this issue. The picture bears the impress of masterful personality. The values are superb; nothing could be finer; the texture and gradations of Trotty's coat have been rendered in their true beauty, without a suggestion of intrusive, intensive realism.

Data: October, 11.45 A.M.; clear light; subject posed, outdoors, in the shadow of a building; 4 x 5 view-camera; $7\frac{1}{2}$ -inch R.R. lens; stop, F/8; 1/5 second; Cramer Crown Plate; M. Q.; P. M. C. No. 2 Bromide.

WILFRED A. FRENCH.

Our Contributing Critics

OUR readers will remember Miss Johnson's entertaining little story, in the January issue, in which the lady related her experiences as a successful picture-maker. Although I remained unconvinced, I admired her pluck in the pursuit of pictorial happiness. Desirous to increase her store of aesthetic information, she places her effort, "The Road", at the mercy of those who are willing to give aid, comfort and encouragement.



Safe Pictorial Guides

THOSE who have read this magazine during the past sixteen years may remember that I have earnestly recommended the study of the works of the old masters in painting for composition, proportion, and other important qualities. I still urge this practice, but with reservations. Do not regard the symmetrical altar-pieces by Botticelli, Ghirlandajo and other artists of the renaissance as examples of composition to be emulated, excepting as decorative, or where a rigid, symmetrical design is eminently appropriate. Even Raphael's famous Madonna del Baldacchino, a beautiful example of symmetrical design, was painted to suit the spirit of the architecture of the church where it was to be placed. Like many other splendid altar-pieces, it glorifies an art-museum. The most celebrated example of symmetrical composition, perhaps, is Leonardo's "Last Supper", long since irreparably damaged, although it is specially famous as a portrayal of supreme facial and manual expression. As such, it should be studied—in form of an engraving (a good impression) by Morghen or Toschi—by pictorial workers interested in portrait-characterisation or genre. Visits to prominent exhibitions of photo-pictorial art—like those of the photographic salons held, in the spring of the year, in New York, Pittsburgh, Los Angeles, San Francisco and Toronto—are well worth the effort. One of the best means to obtain sound pictorial knowledge is the careful reading of such reliable books as *The Fine Art of Photography*, by Anderson; *Photography and Fine Art*, by Bailey; *Pictorial Composition in Photography*, by Hammond, and *Pictorial Photography*, by Anderson. These books are finely illustrated and I, personally, endorse them heartily. They are included in our list of standard works published elsewhere in this issue.



ON THE GROUND GLASS

WILFRED A. FRENCH



A Simple Optical Expedient

ON the narrow wall (fifteen inches wide), between my two extremely large office-windows which look out upon the sky, is a vertical row of photographs. This may not seem worthy of notice; although elsewhere, in a similar place, there is apt to be nothing but a bare space. But this is the sanctum of a photographic, picture-loving editor, and the walls are covered with attractive photographs. On a bright day, when the shades are up, a flood of light enters through this pair of windows, making it difficult to distinguish the pictures which occupy the narrow, intervening wall-space. The interested visitor quickly gives up any attempt to inspect them, and focuses his attention on pictures elsewhere in the room. Having accomplished this commendable object, he usually expresses regret to be unable to see the pictures lined up between the two windows. Asked to look at them, one at a time, through an improvised tube formed by the curved fingers of his hand, the visitor complies and is quick to express his surprise and satisfaction. If the observer is a photographer, he is agreeably surprised at the result, and wonders why he, himself, hadn't thought of the idea. If he understands elementary optics, he remembers that this simple principle is put into practice when photographing against the light by placing a hood over the lens. The exclusion of extraneous, dazzling light subdues halation, defines the outlines of the picture and reveals details in the deep shadows.

Not wishing to subject my visitors to any embarrassment, and to facilitate matters, I made several paper-tubes, one inch in diameter and nine inches in length. By standing about ten feet from the unfavorably placed pictures, and holding one of these tubes close to one eye, the observer is enabled to see them, one at a time, with perfect distinctness and ease. Not only this; but by using the tube on pictures already well-lighted, he will notice an improvement in clearness of vision, because of the elimination of extraneous light-rays and other objects.

By using such a tube, which can be quickly improvised out of a sheet of paper, or by making a roll out of a catalog, the visitor to a picture-gallery will be able to concentrate light and attention on the picture he is viewing. If a loose roll is used, and the size of the paper permits, its diameter can be increased to meet the demands of a larger picture one desires to study.

In observing birds sitting in trees and silhouetted against the sky, a roll made from dark-colored paper, will greatly aid the vision.

The Value of Caution

A WELL-KNOWN photo-pictorialist, who is spending his winter-vacation in Florida, wrote home for his photographic chemicals. They arrived in due course of time; but a solution of potassic ferrocyanide was missing. When he arrived home, some time afterwards, he asked his wife why she did not include that solution. She explained that it was labeled, "Not to be taken!"

Not so the Photo-Pictorial Worker

ONCE there was a man who wanted to go to Heaven. When he died, an angel took him by the hand and led him to wonderful places. He saw majestic mountains lifting their lofty peaks into the blue haze of cloudland. He stood in mighty forests where the spirallike trees raised their heads above the green meadows far below, and through whose branches the wind-harp of God played entrancing nature-melodies. He beheld great rivers winding their placid course to the seas, fed by brook and stream from the secret places of the land. Fragrant flowers lifted their sweet faces everywhere and wafted their perfume on every breeze. Beautiful, wild things played unafraid upon the mountain-sides and in the valleys. Happy children laughed and shouted along the way. Everywhere was joy, peace and serenity.

The man feasted his weary soul on these scenes, as the angel led him. And he said, "Ah, this is Heaven indeed! How magnificent it all is!"

And the angel replied, "No, this is the world in which you lived and which you never saw."—Exchange.

Too Literal

THERE is a camerist of my acquaintance, whose mode of rendering is by means of graphic realism. No object, however small—unless it be a fly or a small insect—escapes his all-seeing lens. In a letter written while he was visiting Munich, Bavaria, last summer, he gave a glowing account of the concerts he had heard in that artistic city, which, as most music-lovers know, is famous for the excellence of its musical performances. "Why," he wrote, "I heard standard works of such great composers as Brook, Commerce, Bumblebee, Wheelwright and Green." I read this formidable list of musicians with wonderment. I did not recognise one of them. Finally, it dawned upon my sluggish brain. In his usually meticulous way the writer had translated into English literally the names of the well-known composers: Bach, Handel, Hummel, Wagner and Verdi.

A Potential Danger in the Studio

SOMEBODY is always trying to embarrass either the photographer or his sitter. Now here is a hard-boiled, unsympathetic, intolerant soul who would stop a flapper from powdering her nose in a crowded elevator; or while crossing the middle of the street, to the horror of onrushing automobilists. He may be responsible for the following, familiar dialog:—

He: "I had something nice to say to you this evening; but I see that you are not in a condition to hear it."

She: "Why not?"

He: "Because, if your face lights up, the powder will go off!"

An Ambiguous Advertisement

"SOMEBODY wants your Photograph," declares an advertisement. All right; but we make this proviso—not if it's for the Rogues' Gallery.—Exchange.



THE CRUCIBLE

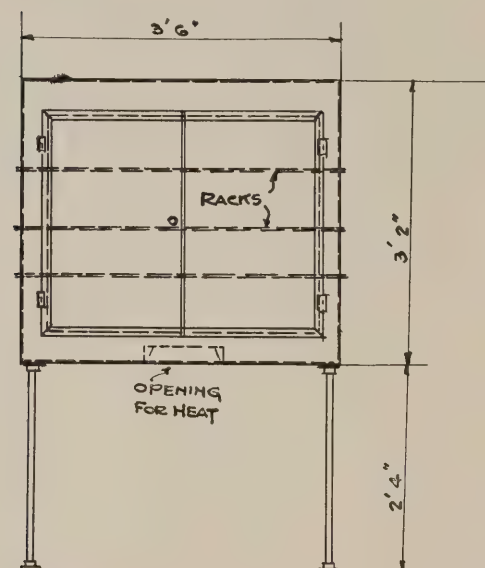
A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



A New Print-Dryer for the Amateur Photo-Finisher

THE amateur photo-finisher is often confronted with the problem as to how to dry his prints in the best way; the machine or device that is herein pictured is made of sheet metal, with racks of wire and cheese-cloth, laid one above the other, as shown in the drawing.

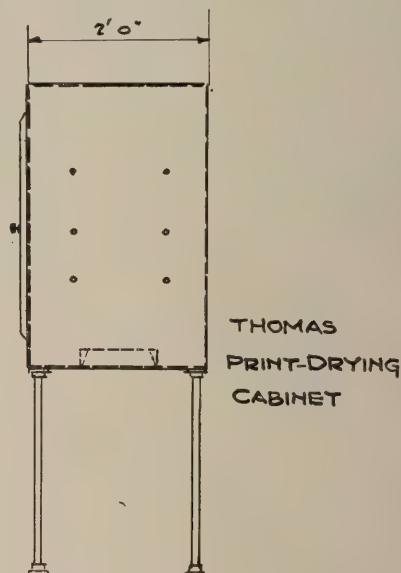


This dryer is used with either gas, oil, or a fan, and will dry your pictures in from twenty to thirty minutes, after they have been removed from the water. The whole apparatus takes up a comparatively small amount of space compared with its value to the finisher and will prove a very economical and satisfactory article for the man who wishes to try out the idea for his own use; the material to make it will not cost over \$5.00, thus saving him some money on an original purchase, and since it has been actually tried out and not found wanting in any way, it can be especially recommended for its proved performance in line of duty.

Additional racks may be added as the need presents itself; one of the best features of this device is the heat-spreading device, which is nothing more or less than a bent piece of metal that rests on the bottom of this apparatus, and keeps any direct heat from actually reaching the prints or setting them on fire when they become bone dry. The dryer stands on iron-legs from the floor and has two doors, which lock tightly, and the prints dry in a very short time without curling.

The racks are easily removable for easy access and cleaning when necessary. There are, of course many types of dryers on the market and some of them are very expensive; but if you want to make one that will do all that they will do and save you some money, try making one like this and you will be well pleased with its effectiveness.

C. H. THOMAS.



After-Fixing of Toned Prints

IN all toning-methods in which ferricyanide of potassium is used (uranium, copper, or iron toning), in which a secondary silver-ferrocyanide is formed, in time there appears a bronzy, bluish gray border or spots on the darker portions of the prints when they are not re-fixed after toning. Instructions for fixing the prints after toning are very rarely given in toning-directions, but the following fixing-bath by Prof. Namias is an exception:

- A. Warm water..... 250 cc.
Hyposulphite..... 100 grms.
- B. Boric acid..... 13 grms.
Warm water..... 250 cc.
- When fully dissolved mix A and B. Or the following may be used:
- Water..... 1 litre
Hypo..... 100 grms.
Sodium acetate..... 50 "

When completely dissolved, add 5 cc. acetic acid. Fixing takes about 10 minutes; then wash thoroughly.



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY



THE interest in amateur cinematography is growing rapidly and is not confined to this country. The *Amateur Photographer* of London is conducting a department devoted to this new art, and the amateurs appear to take to the idea. In this department, I notice that Lord Plunket advises amateurs to have their actors move much more slowly than in real life in order to register properly. Lord Plunket has hit upon one trouble which will confront amateurs, but I must object to his statement. The difficulty is not in the speed but in the character of the motion. Normal motion will appear to be very rough in projection, but the speed will be correct. Remember that a foot of film runs through the projector in the same length of time it occupied in running through the camera. The point of importance is to have the actors' movements smooth and continuous. In ordinary life, a man in taking a book from a table will shoot his hand out abruptly, hesitate and fumble a moment with the book, jerk it up, stop the hand and throw the book open with a jerk. The actor allows his hand to glide forward smoothly, grasps the book without hesitation and without entirely stopping the movement, lifts it through an arc. Then he deliberately opens the book at one place and continues in like manner. He will use no more total time than the ordinary man, but each frame on the film will show an almost constant change in position of the arm. Therein lies the secret. Abrupt movements are so rapid for a given period that the change in position will be too great in two adjacent frames. You will thus understand that the fault lies in the movement being too rapid during certain periods and entire lack of motion during other periods, but not in too rapid total motion.

Take full advantage of the fine lens-equipment you have on your kiné-camera. Owing to the extremely short focal length, the depth of focus at the largest aperture will be great enough for almost any work. Close-ups, of course, will require a smaller aperture in most cases; but usually you will use the diaphragm only to regulate exposure.

When I was a youngster in college I used a small microscope a great deal, in fact I was seldom without it. I then purchased a good compound microscope and was at a loss to know what to do with it. You have no trouble in finding subjects for still-photography, but the question which confronts the owner of a new kiné-camera is, "What shall I photograph?"

The world about you is filled with subjects. At present, motion will be of more importance than composition. You can easily specialise. There is human activity in the cities. Nature abounds with excellent subjects, if you live in the country. Children are always good subjects; in fact, among the best. Jackie Coogan's appeal is that of the child, rather than that of the actor. Human interest is a requirement of news-photographs, this element combined with elementary dramatic form will give your motion films a character which will appeal to relatives, friends and even casual acquaintances—your public. Your viewpoint will now be that of a dramatist rather than that of a pictorialist.

Just one bit of advice concerning the purchase of a camera. This instrument should last for years. For this reason purchase an instrument which requires a standard film which can always be obtained. There are three standard films in use in this country; the professional standard, thirty-eight millimeters wide; the safety standard, twenty-eight millimeters wide and the sub-standard, sixteen millimeters wide. If you expect to use your camera for amusement or home-work only, by all means use the sixteen millimeter film. It is so much easier upon your purse. This is the film used in the Bell & Howell Filmo, Ciné-Kodak, Victor and other new amateur cameras.

Reversal Method Used for Ciné Kodak Films

THE *Ciné Kodak News*, published by the Eastman Kodak Company in the interest of amateur motion-pictures, describes in the November number, the "reversal method" by which the negative-film is changed into a positive. This is the chief characteristic of their 16 mm. film and is a great factor in cutting down operating-cost of their outfit.

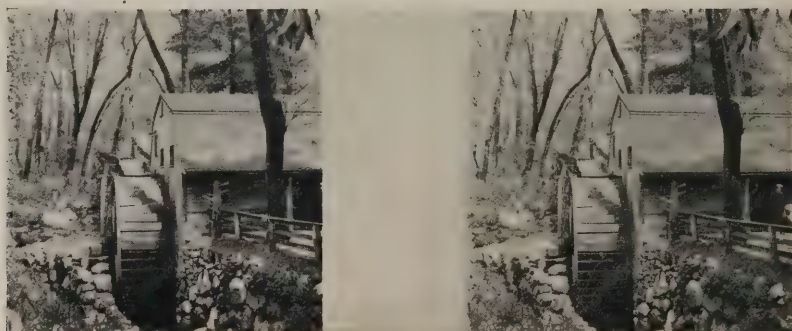
The reversal is a chemical process, the film being first routed through a series of upright tubes which contain solutions that develop it strongly. This results in an unfixed negative. Exposed grains have become black. Unexposed grains do not develop but remain sensitive in character and white in color. In the third step, the dark metallic silver-image—the negative—made from the exposed grains, is dissolved out by a solution termed the bleach-bath. This leaves behind a complementary positive image of unexposed silver-bromide. The film is then re-exposed to light. This makes the remaining silver-bromide grains developable.

After the re-exposure, the fifth step is to pass the film through another series of solution-tubes for developing, fixing and washing in the usual way. This last development acts only on the grains that were not exposed in the camera but were affected later by the re-exposure described in the preceding paragraph. In development these grains become black, of course. Thus the grains that were black in the negative are dissolved away and those that were white in the negative are blackened by re-exposure and development, making a positive ready for the Kodoscope.

This process is so nearly automatic that only three men—"loader", "printer", and "take-off"—are required. Development, bleaching, re-exposure, re-development, washing and drying are all carried on in the machine. At the feed end of the machine, the "loader" splices the incoming film to the tail of the last one. It then unwinds from the roll and proceeds at an even rate through a series of upright tubes which contain the chemical solutions. Following its first development, the film is re-exposed by the "printer". After that it continues through a series of upright tubes where it is developed again, fixed and washed in the regular way. Next, it is routed into a drying-cabinet, the last step before the "take-off" man breaks the splice.



THE STEREOPHOTOGRAPHER



4.5 x 10.7 MM. ($1\frac{3}{4} \times 4\frac{1}{4}$ INCHES) A. JUPENLAZ

Two Popular Stereo-Sizes

IN articles, and other items, frequent reference will be made to the 4.5 x 10.7 mm. and 6 x 13 cm. sizes of stereo-cameras. In order that some of our new readers may be familiar with the appearance and dimensions of the two popular sizes, we have re-printed two pictures which illustrated an article by A. Jupenzaz in our November, 1921, issue. In a subsequent article, the next and largest size of present-day stereo-sizes will be illustrated. With all due respect to our own American photographic manufacturers, it must be admitted that they have not, as yet, seen fit to attempt to manufacture stereo-cameras in the sizes here illustrated. In the meantime, the market is well supplied by stereo-cameras of foreign manufacture; and—it must be admitted—

these imported outfits are beautifully made and carefully designed. Moreover, they may be obtained at all prices and in many models. Our advertising-pages indicate those dealers who are making a specialty of meeting the demand for stereo-equipments and accessories.

Those who have helpful and interesting material to contribute to this department should prepare it and send it in as quickly as possible. We wish all our readers to have a share in it. This department is for them and for those who enjoy stereophotography. We have received much help and co-operation from dealers and manufacturers who will do their share. Please remember that short items, informal articles and short technical data are desired. Let all good stereo-enthusiasts respond with a will.



6 x 13 CM. ($2\frac{2}{5} \times 5\frac{1}{5}$ INCHES) A. JUPENLAZ



LONDON LETTER

CARINE AND WILL CADBY



At present the eye of the photographic public is focused on Mr. Richard Speaight, the well-known photographer of Royalty, who is now visiting all provincial towns and stirring them up to fresh photographic effort. He has the scheme of collective advertisement very much at heart, and there could not be a better emissary than Mr. Speaight with his wonderful energy and charm of manner. When one meets him at his London studio and he chats easily between two sittings, it is difficult to realise that he has probably been speaking at a meeting up in the north the night before; for in spite of his public activities he manages to keep very much in touch with his professional work at the Bond Street studio. Several papers have interviewed him lately, but the most amusing reminiscences were secured by the *Evening News*. Mr. Speaight has long held a kind of lien in the photography of the younger members of the Royal family, and it was in this connection, dating back to Victorian days, that he had some amusing anecdotes to tell, and was able to compare the austerity and discipline that surrounded Royalty in those times to the charming and democratic spirit that prevails in our own.

Once, when Mr. Speaight had been commanded to Osborn to photograph, he was unpacking his camera, etc., in one of the reception-rooms. All at once, one of the ladies in waiting burst in and said, "Oh, Mr. Speaight; will you please take these things away as quickly as you can? Her Majesty is going to pass through this room, and it would be terrible if she saw them." He has always been greatly impressed with the naturalness and consideration of the present generation of the Royal house. A good story of his was how he got a smiling portrait of the Prince of Wales. Our prince, as is well known, is not his happiest when attending ceremonial functions, and so, when Mr. Speaight wanted to photograph him at a state-visit abroad, he saw him standing a little apart with an expression of sad boredom. Mr. Speaight knew one of the young officers standing near, and had the happy inspiration of sending him to speak to the prince. At once his face lighted up, for they had been together at Oxford, and happy reminiscences of the old O.T.C. were discussed, and Mr. Speaight obtained a good photograph.

In an earlier letter, we referred to the possibilities of archaeological photography from the air, and that during the summer extensive work was done in this direction. Mr. O. G. S. Crawford, F. S. A., Archaeology Officer of the Ordnance Survey, and Mr. Alexander Keiller, F. S. A. Scot, hired an airplane expressly for the purpose, and during May, June and July they were continually flying over Hampshire and Wiltshire. Their object was to obtain photographs from the air of interesting archaeological sites and to discover new ones, and, in spite of the exceptionally wet summer, they were extremely successful. The Downs, where they worked, were heavily scored with the marks of its prehistoric and later inhabitants. Every time they went up, they made a fresh discovery, and estimate the number of buried remains as yet uncharted to be enormous. In one instance, from a considerable height, they spotted a square outlined in dark green

in a field of oats, and when they visited the spot a few hours later on foot they found part of a Roman bangle and many potsherds. The chief value of the photographs obtained from the air was that they could be studied at leisure afterwards and accurately plotted from the photograph on to the map. Many of the sites could be seen with the naked eye from aloft far more distinctly than they appeared on the negative; but one would think that with suitable screens the plate should give as good a rendering, and probably this is a side of the work that will need developing.

Anyway, these archaeologists are so satisfied with their three months' aerial photography, that plans are already being made for the future. There is no lack of promising regions to photograph, and those which are richest in archaeological remains will be dealt with first.

The Royal Photographic Society is holding an exhibition of a selection of the two thousand portraits that make the National Portrait Gallery Photographic Record, which is housed in the Reference Library of the National Portrait Gallery. The subjects all sat to Messrs. J. Russell and Sons, the long established firm in Baker Street, and Mr. Walter Stoneman not only made most of the negatives, but introduced the scheme to the Trustees of the Gallery and personally superintended the compilation of the record. The 156 prints shown at the "Royal" are of representative people in many walks of life—painters, writers, clericals, politicians, army and navy, etc., and are naturally absorbingly interesting, especially as Mr. Stoneman, in his photography, has not intruded his own personality unduly. Consequently, one is left a free hand to study the characteristics of people portrayed.

When Major General Sir Lee Stack was attacked in Egypt, his portrait was looked for in the National Record. Curiously enough, it was found in the same envelope which contained that of Sir Henry Wilson, who was assassinated by Irishmen in London. It was a startling coincidence that the pictures of these two prominent servants of the State—both of whom were cruelly murdered in cold blood—should have lain side by side.

We have often had occasion to remark on the faith which the uninitiated have in a good lens or an expensive camera. From their point of view, superior apparatus is infallible and the possession of it the simple key to good work. We have just read a criticism of some new travel-books in one of the very best and most thoughtful of our weekly reviews, in which the writer—eminently sound on all other points—tumbles into this common pitfall. "An excellent book," states the reviewer, "but the author ought to get a better camera with which to take the pictures for her next." And in the same article we are told in regard to another book: "A large number of first-rate photographs, *taken through a really good lens*, supplement the masterly handling of the mass of information provided."

Photographers know that the *present-day* camera is the least important quantity in making a photograph, and if it fails in giving good and accurate records of the subjects placed before it, the fault lies with the photographer through errors of exposure, lighting,

composition or development. The cameras, big or small, cheap or expensive, are all capable of turning out good work. If they are properly handled, we would guarantee that this reviewer could not tell whether a "good" lens or a "better" camera had been used.

But how did this absurd fallacy originate? Was it Kodak's slogan, "You press the button, we do the rest," that convinced the great world outside of photography that the art needed neither manipulative or artistic skill? It may have been; and, no doubt, it made many converts, who, let us hope, have realised that successful photography cannot be attained alone by expensive tools or thoughtless button-pressing.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

PHOTOGRAMS OF THE YEAR, 1924. The Annual Review of the World's Pictorial Work. Edited by F. J. Mortimer, F. R. P. S. 24 pages of text; 93 halftone reproductions. Price, paper-cover, \$2.50; cloth, \$3.50. Boston: American Photographic Publishing Co., American Agents.

The amateur or the advanced pictorialists, and even the general reader, cannot very well keep abreast of the photographic times unless he obtains a copy of "Photograms" and studies it. Without a doubt, some of the illustrations will cause him to wonder, and others may cause him to question the maker's purpose—whether it be simply a striving for an effect or whether it be really good photography. A number of "schools" are represented and, no doubt, each has and will have its adherents. One might ask whether ninety-three pictures can be called truly representative of the world's pictorial art. At any rate, whatever may be the reaction to this year's "Photograms", there should be a willingness and a desire to find a firm foundation upon which pictorial photography may rest securely, no matter what winds of photographic "isms" and "schools" may blow. There is, and always will be, a strong, quiet current of photographic work which will endure and tend to maintain steady progress. It is natural that there should be an effort on the part of some to be different, to "start something", to get talked about—to jar the world out of its conservative ways. Yet, after the momentary excitement and the welcome, or unwelcome publicity is received, the quiet, steady current of true progress continues on its way to the goal of all true art.

As usual, the review of the illustrations in "Photograms", written by F. C. Tilney, is well worth careful reading. Also, the reports of progress in pictorial photography from Australia, Canada, New Zealand, America, Russia, Italy, South Africa, Holland, Belgium, Spain, Scandinavia, and Japan serve to show the general trend of photographic conditions in these countries. The list of contributions comprises the names of the leading workers and is virtually the same as last year. The United States is well represented. As there is a limited supply of copies in paper-covers and in cloth,

we would appreciate having our readers order copies promptly. Last year many were disappointed because they delayed. Send your order to PHOTO-ERA MAGAZINE, Wolfeboro, New Hampshire.

LUCI ED OMBRE. 1924. *Annuario Della Fotografia Artistica Italiana.* 22 pages text and 52 illustrations. Brochure, price, Lire 20; cloth, Lire 25. Add Lire 5 for registered mail. Torino: Il Corriere Fotografico, 6 Via Stampatori.

Again we welcome "Luci Ed Ombre, 1924" and compliment the committee which has worked untiringly to bring together a representative collection of Italian pictorial photography. The volume is modeled closely after "Photograms", published in London. It is to be regretted that a more original format was not adopted by our pictorial friends overseas instead of following so closely the arrangement of the English Annual. This same thing may be said of "Cameragraphs" published in Australia.

Those of our readers who are familiar with the Italian language will be interested in the text which reviews pictorial photography and the illustrations that are included in the volume. There is a splendid collection of pictures among which are many excellent examples of portrait, landscape, genre, and marine photography. The book is well printed and attractively arranged. It is a credit to Italian pictorialists.

THE BRITISH JOURNAL PHOTOGRAPHIC ALMANAC, 1925. Edited by George E. Brown, F. I. C. 816 pages, including text, illustrations and advertisements. Price, paper-cover, \$1.00; cloth, \$1.50. New York: George Murphy, Inc., 57 East 9th Street, United States Agents.

The sixty-fourth issue of the "British Journal Photographic Almanac" has arrived for the benefit of amateur and professional photographers in all parts of the world. Each year its contents serve to instruct and to stimulate the reader. As usual the advertising-pages are of great interest. This year the Editor contributes a splendid article on "The Plain Facts of Lenses". Another good article is "The Best With The Small Camera", by T. L. J. Bentley. Then, there is the familiar "Epitome of Progress" with its account of new apparatus and processes—always of great practical value to the technician. All branches of photography receive attention. Under the various headings we find a list of English and overseas photographic publications, camera clubs and societies, tables of weights and measures with tables for optical calculations and much other information. In short, those readers who enjoy a quiet evening at home can spend a profitable evening with our old friend the "British Journal Photographic Almanac".

MATERIA PHOTOGRAPHICA. A Dictionary of the Chemicals, Raw Materials, Developing-Agents and Dyes used in Photography. By Alfred B. Hitchins, Ph. D., F. R. P. S., F. R. M. S., F. C. S., F. Ph. S. L. 96 pages. Price, paper-cover, 50c; cloth, \$1.00 post-paid. Philadelphia: Frank V. Chambers.

To the advanced amateur and technician this book will prove to be of much practical value. It gives just the information that the experimenter or scientific chemist requires to carry on much of his work. It is not a book for the average amateur photographer, unless he is conversant with chemical formulæ and enjoys chemistry. As a reference-book we believe "Materia Photographica" will serve its purpose admirably in the class-room, laboratory and library. It is well printed and merits a cordial reception among experimentalists and photographic chemists.



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL—ORC.



JACKSON'S HOLE, SOUTH OF YELLOWSTONE PARK

Courtesy of Studio-Light

LIEUT. A. W. STEVENS

Air Service Photographic School, Rantoul, Illinois

THE acme of topographic surveying is in aerial photography. It delineates in minute detail any place or region—the progress of Chicago's new lake-front project; the plotting of an ancient city of Yucatan overgrown with tropical vegetation; the configuration of a battle-line. So important has aerial photography become in recent years—photographs or mosaics superseding blueprints and maps on many immense engineering-undertakings—that the possibility that future surveyors will lay aside their present tools of drudgery for an aerial camera is not considered a preternatural assumption.

That there are several corporations already engaged in this fascinating science, commercially, is well known; but the fact that there is but one school in this country where the student can obtain a comprehensive knowledge of aerial photography is not of general knowledge.

The Department of Photography of the Air Service Technical School, Chanute Field, Rantoul, Ill., has been in practical operation since July 1, 1922. It is conducted under the most advanced methods and so

far ahead of printed publications that the latest editions are considered obsolete. With its efficient teaching personnel which comprises commissioned, enlisted and civilian instructors, the school has graduated, since the date above mentioned to the present time, 139 students classed as follows: Officers; U.S. Army Air Service, 10; U.S. Air Service Reserve Corps, 5; U.S. Marine Corps, 1; U.S. Navy, 1; Enlisted men, U.S. Army Air Service, General Photography, 105; Motion-Pictures, 9; U.S. Marine Corps, General Photography, 8; Total—Officers, 17; Enlisted Men, 122.

The course for officers of the Regular Army lasts thirty-eight weeks and for reserve corps or national guard officers, three months. These two courses cover in their scope all phases of the subject from a general study and demonstration of the fundamental principles involved in elementary photography, through photographic chemistry, mosaic making and photography to and including photographic interpretation or the last-minute methods used in extracting military information from aerial photographs and in disseminating such intelligence. General photography for enlisted men of the Regular Army covers much the same ground, lasts sixteen weeks and produces a competent man in

mosaics. The course for motion-picture camera-operators thoroughly familiarises the graduate with those subjects pertaining to operation and maintenance of motion-picture cameras and practical outdoor-kinematography on the ground and from the air. Its duration is but eight weeks.

These four courses, constituting the curricula of the Photographic School, are handled in so effective a manner that, unlike most graduates of an institution of learning, those who successfully complete their instruction are fit to apply practically the knowledge gained. Robert R. Aurand in *Air Service News Letter*.

RECENT PHOTO-PATENTS

THE following report is made of all photographic patents, the last issues of which have been disclosed to the public, from the records of the United States Patent Office. This report is made exclusively for PHOTO-ERA MAGAZINE from the patent law-offices of Norman T. Whitaker, Washington, D.C. Copies of any of these patents may be obtained by sending twenty cents in stamps to Norman T. Whitaker, 1006 F. Street, Washington, D.C.

Universal Mounting for Aerial Cameras patent, number 1,517,550, has been issued to Sherman M. Fairchild of New York City.

Frederick A. Wenman of Brooklyn, N.Y., has received patent, number 1,518,032, on a Finder.

Patent, number 1,517,669, has been issued to Jervis C. Deane of Washington, D.C., on a Photographic Printing Apparatus.

Process for Coloring Motion-Picture Films has been received by Loren E. Taylor of Los Angeles, patent, number 1,518,946. It has been assigned to Famous Players-Lasky, a corporation of New York.

Joseph A. H. Hatt of Brooklyn, N.Y., has invented a Process for Producing Color Negatives for Photo-mechanical Printing Plates.

Eastman Kodak Company has been assigned patent, number 1,518,396, issued to John M. Donahue of Rochester, N.Y. The title of the patent is Laminated Cellulose Ether-Cellulose Ester Film.

Light-Sensitive Composition patent, number 1,518,997, has been issued to George W. Miles of Sandwich, Mass. It has been assigned to American Cellulose and Chemical Mfg. Co., Ltd., of New York City.

Eastman Kodak Company has been assigned patent, number 1,518,835, invented by Frederick W. Brehm of Rochester, N.Y., on a Rising-Front Mechanism for Cameras.

Patent, number 1,519,004, on a Method of Producing Printing Plates has been issued to Philip Müller of Steglitz, near Berlin, Germany.

Carl G. Johnson of Eau Claire, Wis., has received patent, number 1,520,185 on a Camera.

Another invention on a Camera patent, number 1,521,067, has been issued to Grace L. Bean of Washington, D.C.

Apparatus for Printing Photographic Prints from Negatives patent, number 1,521,399, has been received by Ira D. Sharp of Nicholasville, Ky.

Huebner Bleistein Patents Company have assigned to them patent, number 1,513,321, on a Photographic Printing Apparatus invented by William C. Huebner of Buffalo, N.Y.

THE PICTURE-MARKET

There is a market for every good photograph. The amateur and the professional photographer have the opportunity to sell good pictures and to derive financial benefits from their camera-work. To make this department accurate and reliable we have requested and obtained the hearty co-operation of the editors. We make no claim to publish a complete list of the markets each month; but the names of magazines that appear below we know to be reliable and in the market for photographs at the time of going to press. We have obtained our information direct from the editors themselves.

The American Boy, 550 Lafayette Boulevard, Detroit, Mich. Walter P. McGuire, Managing Editor. Uses photographs accompanied by brief descriptive manuscript for its department of "Novel Inventions and Natural Wonders". Photographs depicting the quaint, the curious, the strikingly unusual are desired at all times. Pictures and descriptions of the new and novel in science are used. Are in the market for photographs, accompanied by brief descriptive manuscript, of unusual boy activities or accomplishments, or of boys who deserve to be nationally notable. All photographs should be glossy, and manuscripts should be typewritten, and accompanied by stamped self-addressed envelope for return.

P. B. Oakley, Geneva N.Y., is in the market to purchase, up-to-the-minute, news-photographs, of interesting events, such as wrecks, floods, fires, explosions, unusual happenings, notables, etc., etc. Size of photographs should be at least $3\frac{1}{4} \times 5\frac{1}{2}$ and larger, although smaller ones will be considered if distinct. Rate paid depends on news-value. Mr. Oakley desires to obtain representatives throughout the country.

Scientific American, 233 Broadway, New York City. J. Malcolm Bird, Art Editor. Uses pictures of new inventions, discoveries, ingenious engineering undertakings, unusual industrial developments, etc. Any size, glossy prints. Any amount of descriptive matter to thoroughly explain the print should be sent. Better write the editor before sending pictures. Pays from \$1.00 to \$3.00 on acceptance.

COMING EXHIBITIONS

MARCH 1 TO 31, 1925. Twelfth Pittsburgh Salon of Photography, Pittsburgh, Pa. Entry-blanks from P. F. Squier, 237 Avenue B. Westinghouse Plan, East Pittsburgh, Pa.

MARCH 7 TO 31, 1925. The Sixth Annual Salon of Photography to be held in The Albright Art Gallery, Buffalo, New York. Under Auspices of Buffalo Camera Club. For entry-forms write to Lester F. Davis, secretary, 463 Elmwood Ave., Buffalo, N.Y. Last day for receiving prints, February 9, 1925.

MAY 10, 1925. V Salon International de Fotografia de Madrid. Last day for receiving prints May 10, 1925. Further information may be obtained from Secretario del Salon Internacional de Fotografia, Real Sociedad Fotografia, Principe 16, Madrid, Spain. (We have a few entry-blanks, printed in Spanish, which we shall be glad to mail to those who are interested—EDITOR)



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



Union Camera Club Photographic Class

THE Union Camera Club, 48 Boylston Street, Boston, Mass., is offering an exceptional opportunity in the form of a class in photography for men and women who are interested in picture-making with a camera. The course, which began January 15, 1925, consists of ten weekly lectures in charge of Franklin I. Jordan, president of the Jordan & Moore Press, and Alton H. Blackinton, staff photographer of the *Boston Herald*, both members of the Union Camera Club. Each subject will be treated with a lecture, demonstration, discussion and laboratory-work by members of the class. Individual attention will be given to each student. The following list of subjects is offered: photography—its history and application to modern business; camera-lenses—different kinds and types, and how to use them; exposure; development; printing; enlargements; composition; portraits and the market. The fee for the entire course of ten lectures is \$7.50—very reasonable for so practical and valuable a course. Detailed information may be obtained from William F. Stearns, 48 Boylston Street, Boston, Mass.

Show by Mrs. Minna Keene

MRS. MINNA KEENE, F. R. P. S., will give an exhibition of pictorial photography at The Camera Club, New York, during January and February, 1925. This will embrace portraits of types, genre, and unusual architectural subjects made by Mrs. Keene in extensive travel and residence in various parts of the world. Her process is carbon. This exhibition was given at The Royal Photographic Society in London during last July.

The public is cordially invited by The Camera Club to all its exhibitions. Admission is free.

The Seattle Camera Club

WE are very glad to welcome the Seattle Camera Club, 422½ Main Street, Seattle, Washington, to the increasing list of camera clubs in the United States and Canada. This new club was organized in October, 1924, and its members for the present, are all Japanese. However, some American workers are expected to join, and active co-operation with other photographic organizations is assured. We note with pleasure that our friend and subscriber Dr. K. Koike is chairman, and that among the charter members are the names of other regular readers and contributors to PHOTO-ERA competitions.

We are indebted to Dr. Koike for sending us the photographic number of *Shumi-No-Tomo*, issued by the Seattle Japanese Music Society. In it we find a splendid article written by him on "The influence of Japanese Literature and Arts in the Photographic Field", and a number of illustrations from pictures made by the Japanese pictorialists of Seattle. Altogether we are sure that the Seattle Camera Club has made an excellent beginning and may it enjoy success and prosperity.

Free Course by the Camera Club, New York

THE Camera Club, New York, has secured Mr. W. H. Zerbe to conduct free classes for members who desire instruction in the principles of photography and the various processes—bromide, bromoil, oil, carbon, carbro, gum, etc. The course is to continue twenty weeks, on Wednesday nights only. As the expense is met by the club, it is a highly commendable enterprise in behalf of the membership and the course of photography.

Camera Club of Cincinnati is doing Good Work

NOT to be outdone by other progressive camera clubs throughout the United States, the Camera Club of Cincinnati, Arno Building, Cincinnati, Ohio, is giving a series of lectures and demonstrations every other Monday evening, since November 10, 1924, for the especial benefit of beginners in photography. The course is entirely free to the public and involves no obligation on the part of those who attend. In short, it is a generous, whole-hearted effort on the part of the Camera Club of Cincinnati to help others to enjoy photography and to derive the greatest benefit therefrom. Readers who live in Cincinnati should avail themselves of this exceptional opportunity to understand the fundamentals of good photography.

Department of Photography, Brooklyn Institute

THE one-man show at the Brooklyn Institute during December was of the work of William Elbert MacNaughtan, the president of the Department of Photography. It is so seldom that Mr. MacNaughtan can be persuaded to exhibit his prints, that everyone particularly enjoyed this exhibition of his fine landscapes. Mr. MacNaughtan showed thirty-three prints, nearly all of which were on hand-coated platinum, a few of his latest subjects being on chloride. The subjects ranged from his earlier and now familiar "Connecticut River" and "In the Berkshires" to his most recent groups of "Marshland", "Peconic Bay" and "A Deserted Village". These last three subjects were each represented by several pictures and all reflected the characteristic charm and imaginative feeling for which Mr. MacNaughtan's work is known and appreciated.

The work of Dr. J. B. Pardoe will be on view beginning January 12 and that of Miss Vera Prosilova, a young portraitist from Prague, beginning February 9.

The classes continued their work regularly. Mr. Zerbe gave two of his public Friday night demonstrations on "Decorative Photography" and "Copying Methods", which were well attended.

At the second December session of Miss Lauffer's class, Morris Greenberg, well-known art-lecturer and instructor, gave a talk on "Subordination in Portraiture for the Photographer" which was very interesting. His first thought was to name four essentials to produce pictorial photographs—an inherent love of beauty,

imagination, technical knowledge, and a knowledge of composition. Under composition he suggested several important elements to be considered—dominance, fitness, rhythm, and subordination—and demonstrated, with a series of prepared illustrations, the principles of subordination as applied to various arts; but all pointing back with ideas touching photography. Mr. Greenberg's talk was much appreciated and filled with practical ideas which will be of use.

MYERS P. JONES, *Chairman*

The Willoughby Photographic Competition

ON the opposite page we reproduce a group of the prize-winning pictures in the Willoughby Photographic Competition which ended October 31, 1924. The judges were the well-known pictorial critics, Messrs. Henry Poore and John Tennant. The substantial cash-prizes offered attracted many amateur and professional photographers and over five hundred pictures were entered. However, it is a question whether a cash-prize really attracts more workers than a medal, cup, ribbon or merchandise. Many manufacturers, photographic dealers and camera clubs have discovered that there is still left in the world a large number of men and women who value other things more than the dollar. In short, there are many who feel that money is not comparable to a simple medal or ribbon as reward for achievement, photographically or otherwise. We urge all our readers to co-operate with and support those photographic dealers and organizations who conduct photographic competitions. Let it be remembered that the more the general public becomes interested in photography, the more will our industry and our hobby grow in strength and prosperity.

Two Beautiful Calendars

RARELY have Bostonians been so luckily favored with calendars for 1925 of such artistic beauty as those issued by Geo. H. Ellis Co., (Inc.) and the Jordan & More Press—both high-class printers of Boston. The one sent out by the Ellis Company is featured by a magnificent 12 x 16 four-color print of a great ship under full sail and relieved against a glorious sunset sky. The original is a painting owned by Albert W. Finlay, president of the Geo. H. Ellis Co.

The other calendar is beautified by a superb 11 x 14 photogravure of a masterpiece in genre-photography by Franklin I. Jordan, president of his company, and a member of the Union Camera Club of Boston. The picture shows Mr. Jordan's little daughter holding in her arms a big, fat rabbit. Those who see it at once "fall for it" and hurry to the Jordan & More Press—well; if any are left, they may get one. The Ellis calendar has the same effect on lovers of marine-pictures.

Dr. Emerson's Awards

THE medals offered by Dr. P. H. Emerson, B.A., M.B., Cantab., for art-photographs, last July, have been awarded. In making his famous decision, this eminent authority showed no partiality, whatever, recognising only absolute merit. His verdict was accompanied by the following explanatory note: "We examined the work of most deceased photographers of note—some sent by relatives, others lent to us. We went carefully over the work kindly contributed by living photographers from ten countries, and notified those good enough for the roll at the time. Their names and those of the medalists will appear in my

history. Those who failed to reach the roll-standard will never be known. It is noteworthy that the best artists were the most modest and the best sportsmen. I thank all for their courtesy."

R. Adamson, and D. O. Hill, R. S. A.—For portraits only.

S. Buckle.—For calotype *technique* and calotype landscapes and one figure-subject.

Mrs. Cameron.—For portraits only.

Capt. D. English.—For art natural-history photographs (silver).

Dr. H. B. Goodwin (Stockholm).—For portraits only.

Miss Julie Laurberg (Copenhagen).—For portraits only (silver).

Percy Lewis.—For landscapes and landscapes with figures (silver).

Prof. Nicola Perscheid (Berlin).—For portraits and figure-subjects in the open only.

H. G. Ponting.—For Japanese stereographs and one portrait only.

"Unknown Artist."—For landscapes and flowers.

In his letter published in the *British Journal*, last October, Dr. Emerson stated that he extended his offer to April 1, 1925, to those who had not yet contributed.

A recent portrait of Professor Perscheid, one of the medalists, together with an appreciation, appears in the forepart of this issue.

Sprague-Hathaway Studios, Inc., Fiftieth Anniversary

THERE must be a tremendous satisfaction to the founders of a business to see it grow until, after fifty years of service, it enjoys the respect, esteem and good will of customers throughout the United States, Canada and overseas. Although it is not always permitted the founders to know the results of their early labors, yet, those who carry on do well to recall the firm foundation upon which the business was built, back in 1874.

The present officers are: Charles E. Wallis, president; Philip P. Smith, vice-president and secretary; and Donald E. Wallis, treasurer. In all the fifty years, the Sprague-Hathaway Studios, Inc. have had no labor trouble; and, beginning this year, every stockholder is an employee. Space does not permit a history of the splendid progress made during the fifty years; but we do understand that the Fiftieth Anniversary Celebration, with the presence of Mayor John M. Webster of Somerville, Mass., and invited guests, was exceptionally well planned; and the banquet, speeches, entertainment and dancing were greatly enjoyed by those who were fortunate enough to be present.

Emerson's History of Artistic Photography

P. H. EMERSON, B.A., M.B. (Cantab.), whose work on "Naturalistic Photography" created such a stir in the 80's, and caused the revival of true pictorialism in vogue today, is writing a history of artistic photography. In this work will be included a roll of eminent pictorialists, past and present, who have attained a high rank. To complete this roll, he desires American workers to send twelve unmounted prints, for examination by a committee who will pass on their merits and decide if the contributor is worthy of inclusion in the honor roll. If postage is sent, in postal money order (not stamps) the prints will be returned. Entries close in England, April 1, 1925. Address Dr. P. H. Emerson, 5 Lascelles Mansions, Eastbourne, Sussex, England.



PRIZE-WINNING PICTURES—WILLOUGHBY PHOTOGRAPHIC CONTEST

- | | | | | | |
|---|-----------------------------|---|----------------------------|---|-----------------------------|
| 1 | <i>First Prize—Class A</i> | 3 | <i>First Prize—Class B</i> | 5 | <i>Second Prize—Class A</i> |
| | <i>Ross R. Calvin.</i> | | <i>Kenneth D. Smith.</i> | | <i>John T. Osborne.</i> |
| 2 | <i>Second Prize—Class B</i> | 4 | <i>First Prize—Class C</i> | 6 | <i>Second Prize—Class C</i> |
| | <i>Frank O'Neill.</i> | | <i>Dr. J. B. Pardoe.</i> | | <i>Chas. A. Hellmuth.</i> |



OUR LETTER-BOX



Prices of Pictorial Photographs

I HAVE read your Editorial, "Prices of Pictorial Photographs", and while "price" will always be a debatable question, I am very much in accord with the general thought you express in the article. Frankly, I feel that the average price asked for the average Salon print, by the average pictorial worker, is not commensurate with the quality of his or her esthetic creations. At the present time, the casual visitor at a photographic show is not interested in the purchase of prints, with the result that price is not considered, much as we might like to have them become "owners". Past Salons prove this. Those who want to buy, will buy; and with this element price is, as a rule, a secondary consideration. While serious workers are striving to educate the public in the appreciation of pictorial photographs, these workers should not lose sight of the fact that an article cheaply priced is cheapened.

Artistic and Pictorial Photography, while it has made giant strides in recent years, still has its "own row to hoe." Taking the public as a whole, I do believe that the thinking element is beginning to appreciate what the serious photographic worker is trying to do, and has done, with the camera as his means of expressing an artistic idea.

G. W. HARTING.

THE Editorial in PHOTO-ERA for January, 1925, is a timely one, and worthy of the notice of pictorialists, connoisseurs, art-dealers, and professional photographers. I, for one, thank PHOTO-ERA, and wish to place myself upon record as being in accord with the editor, with, however, certain reservations. The art-connoisseur is beginning to see money-value in good pictorial photographic work. Art-dealers have bought from our (Pittsburgh) Salon for resale in their shops. Most sales are made to patrons for themselves. Indeed, one of our own members has acquired quite a collection of the best prints shown at the Pittsburgh Salon, selecting several prints each year. Regular patrons are purchasing choice works each year. Good and attractive subjects in good mediums—recognised in various Salons—should bring better prices; but I would suggest caution not to go to extremes in fixing the price. There might be however some cause for question as to duplication, and it is possible that some might object to paying a high price for a picture, knowing that he might find an exact duplicate of it in any house that he enters. I mention this partly to bring it to the attention of PHOTO-ERA's readers, and partly because of the comment one hears at times—"That's only a photograph!" It is possible that it might become a different thing, if the buyer knew that he possessed a thing unique, the original, with no copies extant.

O. C. REITER.

As with other artists, the photographer's results depend upon his ability to see and upon his training in selection and arrangement; and further upon a technique that requires as sure an instinct and as exhaustive practice as does that of the pencil or the

burin. Much excellent photographic composition is more or less freely admitted. Appreciation of technique is untrained and grudging; and, in this latter matter, I would recommend the study (in any exhibition) of chloride and bromide prints by the very few masters of those so regarded simple processes, in comparison with the average worker's output of these types. If, then, good photographic art makes equal demands upon its creator with, at least, other monochrome work, why should not its worth be recognised, and its production be rewarded by similar prices?

DR A. D. CHAFFEE.

OF the few photographs I have bought, some have faded badly rendering them useless. This fact would affect my buying photographs and paying big prices were I able to buy, and as I would so much wish to do.

I visited a fine library and museum of Graphic Arts not long ago in which were many fine books and prints dating from the earliest periods. I was struck by the quality of many of the etchings, engravings and lithographs. Many of them were portraits of the artists represented in the collection. There were photographs there, also portraits of artists represented in the collection, and of a much later period. The photographs were dull, faded, weak. I do not doubt that in their day they were pretty good portraits, maybe as good, if not better than some of the engraved or etched portraits, but not *now*.

The permanency of photographs is a much-debated question among photographers themselves, and photographic mediums of printing that are considered permanent are rarely used today by any of them. I do think that the photographer deserves all he can get for his work; for he must work as hard as any craftsman to make a fine product and should be paid as well. Photographers should not sell their work, however, at any price, if it is not done honestly and is not permanent.

CLARENCE H. WHITE.

I READ with a great deal of interest the editorial, Prices of Pictorial Photographs. The presentation and discussion of this subject is very opportune and enterprising.

In the old days, when photographers were too modest, and in doubt of the artistic merit of their productions, the prices fixed by them, in most cases, was just sufficient to pay for cost of production. Although there is an enormous demand for pictorial photographs for illustrations and advertising-purposes, besides for collections and studies, many producers and purchasers have never gotten away from the old order. Yet it depends upon the pictorialists, themselves, what they can demand and obtain; upon themselves, as to how good their work is and what it will command; likewise as to whether they will hold out for their price, or need the money. For illustrations must be obtained now by periodicals, sometimes regardless of cost, and they will pay if they have to do so; not otherwise. Outside of periodicals, the demand is not great. There are a few collectors who are well versed in art and buy good

photographs when they discover them; the rest of the demand comes from new, aspiring workers, who want them to study and will buy almost anything they see, if they happen to know that it is by a worker who has a reputation—whether deserved or not.

Speaking of Misonne's work, fifty-eight prints of his shown at The Camera Club, New York, were sold at his fixed prices; but *in dollars*, which meant much more in Belgium, where the purchasing-power of fifteen dollars was about \$40. Photographers should raise their prices and hold them; let the public take or leave their prints, and more pictures will be sold than at the lower rates.

FLOYD VAIL.

YOUR Editorial—Prices of Pictorial Photographs—is of great interest to all pictorial photographers. During the last three years, I have handled hundreds of photographs. It seems to me that our work must come up in value if we wish to charge higher prices. So few pictorial workers do really fine technical work; but we have some who are setting ideals for us. When Laura Gilpin sends a print for exhibition, one is always sure that the technique will be fine and that the print will be well presented. There are others who show the same care.

As for permanence, I am surprised that you do not mention Platinotype and Palladiotype, as no one questions the permanence of prints on these papers. In fact, prints on them are like old wine and improve with time. No one that understands the processes doubts the lasting qualities of bromoils and gums.

It seems to me, that our aim should be to deserve higher prices and then to ask them.

ANTOINETTE B. HERVEY.

THE subject of the absurdly low prices at which pictorial photographs are sold has often been a topic of animated discussion among various members of photographic societies. Why a person should sell the produce of his or her artistic brain for a mere pittance, while the painter sells a similar thing for a fabulous sum, is one of the inexplicable facts connected with pictorial photography. Why I should tag an 11 x 14 gum landscape \$25, and sell it, and the same day sell a man a portrait of himself for \$200, I do not know; yet I am doing this foolish thing repeatedly. It is really because the consensus of opinion is that one should charge about \$15 to \$25 for a salon-picture. This seems to be the "established" price. Custom, possibly, is responsible for this foolish idea, and, indeed, it is foolish. I think that you are dead right, brother French, in awakening us sleepy photographic cranks to the fact that from now on we must get what our work is worth.

T. W. KILMER.

As a member of the Pictorial Photographers of America, I beg to offer my honest opinion in reply to your Editorial—Prices of Pictorial Photographs. The law of supply and demand still sets the price for things that must be sold. Salesmanship determines anything above that price. Pictures in general are used to decorate a wall. (I know of no collector of photographs as there are of etchings). Suppose that we have a wall-space to decorate. Upon looking around, we find etchings by foremost etchers for \$12.00 to \$50.00; oil-paintings with more or less character from \$10.00 up, and color-reproductions of old and modern masters from \$5.00 up. The Pictorial Photograph

has all this to compete with—at least, in New York City. If we expect to sell a photograph for \$20.00, it must have something in it, and it is possible to put it in; but it doesn't just happen to be in—it must be put there *intentionally*.

IRA W. MARTIN.

HAVING read your editorial in the recent issue of PHOTO-ERA, I wish to say that I heartily agree with your views concerning the prices of pictorial photographic prints. They should bring better prices. The public, however, seems loath to pay higher prices for pictures produced with the camera. This difficulty will probably be overcome if the picture-buying public can be made to understand that prints, such as bromoils, enjoy absolute permanency, the image being entirely in oil-pigment and immune to the ravages that time and light will make in an ordinary bromide print. I think the movement you have initiated to get better prices for pictorial prints an admirable one, and I wish you great success in the undertaking.

RAYMOND E. HANSON.

THAT "The laborer is worthy of his hire" has always seemed to me a very worthy sentiment and, therefore, it seems that if a purchaser really wants a picture, he is willing to pay a price which will reimburse the maker for something more than the actual cost of materials used.

You have started an admirable movement and one in which you have my best wishes for success, together with my own personal thanks for what you are doing for the pictorialists in photography.

RALPH OSBORNE.

I HAVE read with considerable interest what you have to say on the subject of the prices put by photographers on their prints.

Personally, I feel that the price one puts on his own prints is purely a matter of his own feeling.

If he wishes to give his prints away or sell them at a low price, it is purely a matter of his own business—a matter with which you and I have no concern.

Those who make their living from the sale of their pictures are naturally concerned at keeping up the prices put on exhibition-prints; but they—I am glad to say—are in the large minority among our salon-exhibitors.

If our amateurs choose to put small non-commercial prices on their prints, thus making it possible for their work to pass into the hands of those interested in acquiring them, no one is privileged to criticise them.

Personally, I do not put any price on my prints; hence what I write is without any personal feeling.

I feel very strongly that those who make photographs which are worthy of acceptance by a salon-jury, have an absolute right to sell that print for whatever they may choose to ask.

WILLIAM A. ALCOCK.

[We are glad to get these expressions of opinion and we hope that many pictorialists will send in letters. We have more coming and promised; but limitations of space and the necessity to go to press compel us to confine the replies to these two pages. We would be especially glad to hear from our readers on the Pacific Coast. There was hardly time for them to get a letter back before we went to press with the February issue. EDITOR.]



THE PUBLISHER'S CORNER



To Readers, Subscribers and Advertisers

OUR January number went to press before we had the opportunity to acknowledge the large number of Christmas and New Year's Greetings which came to us from all parts of the United States, Canada and overseas. Virtually every letter contained a message of good will and, needless to say, every one of these is deeply appreciated. Then, too, we received many attractive cards made by the senders themselves. To acknowledge each friendly message by name would require more space and time than we could spare; for it would virtually mean a list of every letter and postcard received for several weeks. Therefore, we are sure that our friends will understand and will accept our sincere thanks for the many words of cheer and encouragement which were made part of their regular correspondence.

With regard to Christmas and New Year Cards we will endeavor to record each one; but should any friend's name not appear, let him rest assured that it is simply an unintentional oversight due to pressure of many duties and not to any lack of appreciation. As we write these lines the pile of cards is before us and we will begin at the top: Kenneth D. Smith, Dr. J. B. Pardoe, Joshua Q. Litchfield, Cornelia Clarke, The Pittsburgh Salon, Lena McVeigh, Mr. and Mrs. A. W. Finlay, Frank V. Chambers, Dorothy Jarvis, Fort Dearborn Camera Club, Charles Ditchfield, Mr. and Mrs. Sigismund Blumann, John A. Tennant, Photographic Circle of Montreal, Mr. and Mrs. Herbert C. McKay, Mr. and Mrs. Franklin I. Jordan, Harold I. Orne, William Ludlum, Major and Mrs. Charles H. Mason, Louis R. Bucher, Clarence H. White, F. N. Crowther, William A. Alcock, Edgar S. Smith, Arnold Roberts Paper Company, Kennelly Paper Company, George H. Ellis Company, William S. Davis, William T. Adderley, Boston Mailing Company, Mr. and Mrs. Stanley R. Benedict, Mr. and Mrs. Fred Schmid, Sophie L. Lauffer, Frank Roy Fraprie, Dr. and Mrs. F. A. Hubbard, William H. Zerbe, Mr. and Mrs. Abraham Feigenbaum, Mr. and Mrs. Percy Y. Howe, Herman Goldberger, Mr. and Mrs. Samuel F. Falk, Dr. T. W. Kilmer, Mr. and Mrs. Albert H. Dockray, L. J. Creegan, Dr. Frances M. Howell and Eleanor F. Jones, Camera Craft Publishing Company, Frank H. Wildung, Mr. and Mrs. C. A. Bonfils, Dan McCowan, Suffolk Engraving and Electrotyping Company, James B. Herrick, Bausch & Lomb Optical Company, Floyd Vail, F. R. P. S., William Clark Noble and Fairchild Aerial Camera Corporation.

A. H. BEARDSLEY.

WILFRED A. FRENCH.

Why an Expiration-Notice after Renewing Subscription?

SOMETIMES a subscriber sends in his renewal-order with remittance and subsequently gets an expiration-notice with the following month's magazine. Naturally, he wonders how it happens; especially as he knows that he has sent in his renewal. Moreover, often he has our acknowledgment-card to prove it. Well, let me explain. It requires from four to six

weeks to get out an issue of PHOTO-ERA MAGAZINE—from the manuscript to the printed and bound copies. A part of the preliminary work is the preparation of the mailing-list for the month. Also, the expiration-list is prepared and notices are attached to the envelopes. If a subscriber happens to send in his renewal a few days before the end of the month, it is very likely that the expiration-list is already made up and the magazines may be leaving the bindery for the post-office. Hence, it is too late for us to catch the expiration-notice which then will reach the subscriber, after he has sent in his remittance. In all such cases, we hope our readers will bear in mind this explanation; and, if necessary, write us promptly should there be any misunderstanding.

Mrs., Miss or Mr?

Of late many women have taken an active interest in our competitions and have won prizes and Honorable Mentions. In most cases, they make it clear whether or not they are women—married or unmarried; but there are others whom we have addressed as "Mr." for a number of months, only to find out that the maker of the picture was a woman. Frankly, how are we to know when a name is written thus, on a picture or data-blank: "J. M. Norris" or "A. C. Brown"? How should we know that it is "Miss Julia M. Norris" and "Mrs. Alice C. Brown"? I know that some women like to give the impression that it is a man who is writing. This is all very well in the case of articles; but in our competitions, and for reference in "Our Illustrations", we believe that our women-readers ought to feel perfectly free to be themselves and not lead us into making an unintentional blunder by referring to "his" splendid landscape when it should be "her".



"And now he's got a Radio"

My readers will recall my references to radio and photography. They will remember that I advanced the suggestion that there was room for both and that neither one should be neglected. In fact, I made some other suggestions and conducted a radio photo-contest to test out my theories. When the dust had settled, I made up a little report which I gave to our readers. However, one friend wrote that it was all very well for me to say what I did because I did not own a radio myself. He earnestly hoped that I would catch the radio-fever and, then, he predicted that I would reverse my position on radio and photography. Well, Santa Claus brought a modest two-tube radio set to my house, and the neighbors are saying, "and now he's got a radio". Yes, I have tuned in Chicago, Pittsburgh, Washington, New York, Boston and Montreal. What's more, I have listened in until the early morning hours. However, I still maintain that there is plenty of time to enjoy the radio and to do good photographic work without giving up one in favor of the other.



"THE HOUSE IS IN SESSION!"

JOSEPH COBURN SMITH

FIRST PRIZE—MEMBERS' SHOW, UNION CAMERA CLUB



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No. 3

Freaks, Stunts and Fuzz

FLOYD VAIL, F.R.P.S.



IN its notice of the recent salon of photography held in Paris, and referring to the American section, *Photo-Revue* of Paris says: "L'École américaine se distingue surtout par ses conceptions personnelles, dont l'originalité déroute parfois le spectateur. A côté de tableaux de tout premier ordre . . . nous trouvons assez souvent des compositions abracadabrantes telle que cette nature morte, où un couteau, deux gâteaux et un pain de fromage ont la prétention de composer un tableau!"—which, freely translated, means: "The American school is distinguished specially for its personal conceptions, the originality of which, sometimes, astounds the spectator. By the side of works of the first rank we find, quite often, amazing compositions, like this still-life, wherein a knife, two cakes and a cheese have the pretension of composing a picture!"

There are a few American workers—a very few, comparatively—who, probably because they are incapable of doing the highest kind of pictorial photography, or are too little disposed to make the exertion required to do it, put material objects together, in the form of designs, and after the rudimentary studies of art classes, and pretend—or perhaps think—they are producing works of art! These exercises are sometimes clever, for what they are worth, and are often accepted and hung by juries at various salons here. This might do little harm if it were not for the fact that they are often sent to foreign salons, where they are frequently accepted—and always erroneously—as representative of "the American school." At some of these foreign salons they are honestly mistaken; at others, I suspect, they may have their doubts, but are quite willing to display freaks, stunts, etc., to put the laugh on Americans. In comparison, it does not harm their more sensible productions.

Gradually, it has become established as a fact, in some directions, that all America is given to *bizarre* conglomerations. Most beautiful and representative work from the United States has been rejected at foreign salons, and abstractions, semi-abstractions and weird concoctions accepted and hung in their place.

Paris is an excellent illustration. For a number of years, owing to the war, no salon has been held there. Last autumn there was a revival of the old, famous salon. Along with "work of the first order"—as the *Photo-Revue* puts it—there was received some of this "freak nonsense." The selectors honestly thought this now represented the "American school", and hung some of it alongside of works of genuine American photographic art. The comparison with what they received from other countries astonished the artistic French. No wonder that sneers were evoked at the "pretension that such things composed a picture"!

Now, it is about time that American selectors, and the editors of our photographic magazines and annuals, threw such stuff out whenever it is presented. For the good of the cause, on which their own good depends, it should be done invariably, without fear or favor. And along with the kind of work I have described, there should be included the silly "mush" and "fuzz" perpetrated by those who strive to imitate real and commendable soft-focus productions, but who are ignorant of the whole matter. Not one in a dozen of these, as can be seen by the results shown, knows a good soft-focus lens from a bad one; fewer than this number know how to focus with a good one, when they own it; fewer yet know what they are after, or ought to seek, when they employ one. They get something which is often an abomination, editors reproduce it, or juries accept it, and thereby make the confusion more confounded. Few know that

a really good soft-focus lens is almost a scientifically constructed instrument, or should be, and that few are. It is the general impression that "any old kind" of diffusion, or any instrument or appliance that will "fuzz up" everything, is suitable; and it is surprising and a disgrace that so many exhibitors that have got an undeserved reputation, practise such bastard photography and are given a chance to exhibit it at salons or in photographic publications. They ought to be squelched, or American photographic art will become the laughing stock of the world.

Not an annual issued in recent years, either in this country or abroad, has contained much American work that is fairly representative; while some have blazed with examples of soft-focus monstrosities, freaks and stunts—all attributed to the standard of American art!

Brussels and Paris—two of the outstanding salons of 1924—are both going to publish albums showing some of the work hung from various countries. I fear that there will be included much that was contributed by the United States of the kind to which I have referred and in all honesty attributed to the American school.

If all except the very highest pictorial art

shall be excluded in the future from our salons and periodicals, all the "half-baked" productions will be stopped. It is said that some people have committed murder to get a reputation, or to see their names in print; and it is not surprising that some have murdered poor, old American pictorialism for the same purpose. Jurors and editors alone can stop it.

I have been exhibiting for the past five years the best pictorial photography of various countries of the world, by some of the most eminent workers, in one-man shows and national collections, and I do not recall a single example of a freak or stunt, and not half a dozen cases of the "fuzzy-pie-eyed" type in all that time, from any foreign quarter.

Are Americans alone to pose as a lot of eccentric wiseacres before the rest of the world?

[Although what our good friend Floyd Vail has to say may appear to be a bit harsh; does it not come very near the truth? Whether or not our readers agree with him, we do believe that his statements—based on long experience with the finest in pictorial photography throughout the world—merit the careful consideration of those who have at heart the best interests of American pictorial photography.—EDITOR.]

Looking Towards the Sunset with a Camera

ALLEN H. BENT



FOR an hour before the sun's setting "the clouds that on his western throne attend" are occasionally very interesting, certainly worthy of special attention by photographers. Sometimes, they are still more beautiful—in color at least—in the few minutes that succeed the sunset; but that is another story. An hour before sunset or even fifteen or twenty minutes later there is still light enough ordinarily for a successful snapshot, if the lens-stop is opened wide. After that, a time-exposure is necessary. If you can find a nearby tree to stand out against the sky, or a water-foreground, so much the better; but do not spend too much time looking; for, although on some days there are "lazy-pacing clouds", most clouds seem to be in a hurry. Many others besides Wordsworth have asked "Oh whither with such eagerness of speed?" only to find, as he did, that while questioning that, they had fled.

We are too earthly with our cameras. We have to stick pretty close to the ground during business-hours, most of us, although aviation is making exceptions; but there is no reason that we should not consider the heavens after work.

Perhaps looking towards the sunset appeals more to older photographers. Well, there are clouds at sunrise for the younger enthusiasts to capture.

I have never quite forgiven John Burroughs for saying "The camera has no imagination, no sentiment, and no memory, and its literal truth is not art." If the camera has no imagination, the man behind it frequently has; and it can be made to reproduce poetry as well as prose. But in the same volume, "Field and Study", in which he scolds the camera, Burroughs points the way that we are going:

"At times I almost rebel at the glare of midday. How prosy life seems then compared with the feeling of the morning and the evening. The vertical flood of light is merciless. It kills all illusion. It emphasises the hard reality. It strips the landscape of its glamour. Romance flees away." The landscape-photographer realises the truth of all this. There is no poetry under a glaring midday sun. Nor are sunsets made up entirely of color. There is generally beauty of form. When the shadows lengthen and there are shapely clouds in the sky, then is the time to go forth armed with your camera and make pictures.



THE WINNESCHIEK

DR. W. C. CULLAM

FIRST PRIZE, SCENIC GROUP—IZAAK WALTON LEAGUE

Photography in the Izaak Walton League

JOHN CURTIS THOMSON



HE St. Paul chapter of the Izaak Walton League of America, in September, 1924, held a two weeks' exhibition of photographs that helped to stimulate interest in nature and outdoor-photography. The pictures were by Minnesota photographers and of Minnesota subjects, and the competitive photographs were by amateurs who are members of the League.

The Izaak Walton League is working earnestly to "save and restore to posterity the outdoor America of our ancestors". The members are making it their business—and they are succeeding—to see that we continue to have wild life and scenery to photograph.

One of the most energetic members of the St. Paul chapter is Harry S. Thompson, chairman of the educational committee, who is in the printing-ink business, and who is an enthusiast on all outdoor-sports and activities, including outdoor-photography. The conception of this exhibition was his, and he saw to it that it was successfully carried through. He it was that worked up interest enough among the members to have a sufficient number submit pictures to make the exhibition worth while.

Arrangements were made with the St. Paul Institute of Art for the show to be held in the Institute's exhibition-hall in the St. Paul Public Library.

The men who selected the prize-winning pictures were Judge Grier M. Orr, a veteran sportsman; Howard Kahn, managing editor of the *St. Paul Daily News*; H. R. Gault, managing editor of the *St. Paul Pioneer Press and Dispatch*; George Resler, an artist whose etchings are nationally known; and the writer of this article, an industrial photographer.

The exhibition obtained wide publicity of the best and most dignified type. Both the daily papers printed several notices in their outdoor-pages; and many of the pictures were reproduced in their rotograph-sections, with daily notices in their "What-to-see" bulletin.

The prize-winning pictures were shown for two weeks in one of the prominent bank-windows, and now the whole exhibit goes to each of the four public high schools of the city, where it will be seen by six thousand pupils. The Ten Thousand Lakes Association is to have the pictures at its annual meeting. After all this publicity, the exhibition is available for sending to any chapter of the Izaak Walton League that



CAMP ON THE ROCKS
SECOND PRIZE, SCENIC GROUP
IZAAK WALTON LEAGUE

HAMILTON LUFKIN

desires to show it for private or public benefit.

Although the pictures were nearly all made by amateurs who had no training in pictorial photography and had only a native taste to guide them in selection of subject and point of view, they averaged very well indeed. Mr. Thompson helped them make selections from the films they had on hand; and, under his direction, the pictures were enlarged to about 8 x 10 inches and mounted uniformly on 14 x 19 ten-ply blank cardboard with an overlay of cream postcard-stock, unframed. This gave them a neat, uniform appearance.

There were, perhaps, but two men that had more than the average amateur's experience with a camera: D. Lange and Donald Hough. Mr. Lange is principal of the Mechanic Arts High School, a close observer and student of nature, and author of many magazine articles and books on outdoor-subjects. Mr. Hough is a contributor to several of the outing magazines and editor of the outdoor page of the *St. Paul Daily News*.

He is an authority on canoeing, camping, and fishing in Northern Minnesota and is familiar with conditions in the Superior National Forest. He arranged the outing-trip the past summer for Irvin Cobb and Robert H. Davis. The other exhibitors were busy professional or business-men who use the camera occasionally.

This first exhibition of the Izaak Walton League was a success. So much publicity was given it that it stimulated the outing-spirit and the desire for more and better photography. We can hardly overestimate the good such a show does in a community. It never makes game-animals fewer to stalk them with a camera.

Prizes awarded in Izaak Walton League Photographic Exhibition, St. Paul, Sept. 11 to 25, 1924.

ACTION GROUP.

First prize: Dr. E. H. Bohland, "Working for his Master." Split-bamboo bait-casting rod, given by "Call-of-the-Open" Department of the *Pioneer Press*, St. Paul, Minnesota.

Second prize. Donald Hough, "A Forest Symphony." Kodak, given by Zimmerman Bros., 381 Minnesota Street, St. Paul.

Third prize. F. W. Kuesel, "Fishing the Cascade." Copy of Izaak Walton's "Complete Angler," given by the St. Paul Institute.

SCENIC GROUP.

First prize. W. C. Cullam, "The Winneschiek." South Bend Anti-backlash Bait-casting Rod, given by the "Outdoor" page of the *Daily News*.

influential organizations composed of earnest men and women. Last year the well-known Appalachian Mountain Club held an exhibition which we were very glad to review because of our desire to call attention to some of the excellent work being done. The fact is that our large salons receive their full share of attention and publicity; but worth-while exhibitions conducted by organizations, many of whose members are enthusiastic photographers receive comparatively little attention. PHOTO-ERA MAGAZINE is trying to encourage such organizations to



WORKING FOR HIS MASTER

DR. E. H. BOHLAND

FIRST PRIZE, ACTION GROUPS—IZAAK WALTON LEAGUE

Second prize. Hamilton Lufkin, "The Camp on the Rocks." Autographed copy of Dr. Jas. A. Henshall's "Book of the Black Bass," given by Educational Committee, St. Paul chapter of the League.

Third prize. H. W. Hitchcock, "Autumn Reflections." Five-dollar purchase-check (photo-supplies), given by Co-operative Photo-Supply Co., 381 Minnesota Street, St. Paul.

[With all due respect to the splendid salons at Pittsburgh, Los Angeles, Buffalo, Toronto, London, England and elsewhere throughout the world, we believe that much good may be accomplished for the growth of photography by encouraging exhibitions among the large and

make the most of photography and thereby to increase the number of men and women who have learned to love the gentle art and science of photography.

In the present case, we are glad to reproduce the prize-winning pictures of the recent Izaak Walton League Exhibition which was held in St. Paul, Minnesota. It is not suggested, nor is it claimed, that these pictures are offered as perfect examples of pictorial photography. However, we do claim for them the earnest consideration of our readers because they represent a sincere attempt—and a successful one—to apply photography to the splendid purpose for which the Izaak Walton League stands today.



A FOREST SYMPHONY DONALD HOUGH
SECOND PRIZE, ACTION GROUP

MORNING ON THE ST. CROIX HARRY S. THOMPSON
HONORABLE MENTION—SCENIC GROUP

IZAACK WALTON LEAGUE



FISHING THE CASCADE RIVER F. W. KUESEL
THIRD PRIZE, ACTION GROUP
IZAAK WALTON LEAGUE

Moreover, these pictures are milestones along the way to greater photographic exhibitions and we wish to go on record as endorsing and encouraging all such photographic exhibitions when conducted by those who are sincerely and enthusiastically striving to accomplish great things for humanity and our country.

The author of this article, with characteristic modesty, refrains from any mention of his active part in the exhibition. Moreover, Mr. Thomson is a pictorial photographer, as well as an industrial photographer, of no small accomplishments and he has given a number of one-man shows at the St. Paul Institute. The exhibition consisted of one hundred pictures; but twenty-five were not eligible for prizes, as they were made by those who conducted the exhibition and by professional photographers who were members of the League. The purpose of the exhibition was to clear the way for the amateurs exclusively. Therefore,

let us study these pictures carefully, let us give credit for the good work done and let us lend our support and encouragement to all similar exhibitions in the future.

Let it not be assumed that PHOTO-ERA MAGAZINE fails to value the splendid and inspirational character of the leading salons of the world. It does, and fully so. However, the fact remains that those who contribute to a salon or visit one are in the minority as compared to the thousands of average amateur photographers. It is to interest these thousands in worth-while photography that PHOTO-ERA MAGAZINE believes in giving space to every sincere effort which is made in that direction by an influential organization. Moreover, let us remember that photography is not solely for the pictorialist, but serves the physician, scientist, astronomer and businessman as well. Good record photography has its important place. EDITOR.]



FIGURE 1

WILLIAM S. DAVIS

The Making of Composite Photographs

WILLIAM S. DAVIS

Part I



UTILISING two or more negatives in the making of a finished photograph is an old practice—as old as the days when wet-plates and albumenised-paper were universally used. It is true that abuse of the method laid it open to criticism; but the fact that failures occur when a given process is handled injudiciously is not a sufficient reason for the wholesale condemnation of what, in more experienced hands, may prove a good thing. Such, it seems, is the position of composite or combination photography, which increases the range of a capable photographer's resources and thus enables him, at times, to express his ideas more adequately.

That it is preferable to obtain the desired result with one exposure may be granted, as a matter of course; not merely because of the greater assurance of getting all the parts into harmonious relation but, as well, the saving in technical manipulations required. Why, then, resort to combining parts from different negatives? For the good reason that it is not always practicable to obtain a finished ensemble with one exposure. One may, for example, come

across a beautiful bit of landscape when the sky is clear and recognise the fact that the subject really needs a certain type of cloud-forms to complete the pictorial effect. The location being such that the spot cannot well be revisited when the right sky might be present, the solution of the problem lies in photographing the scene as it is and afterward printing-in a suitable cloud-formation from a separate negative. Again, a scene possessing so many good qualities that one hesitates to pass it by may contain an empty space that needs such a touch of life as is imparted by a suitable type of human figure, or an animal. Composite printing can supply the missing touch. One more example: A pleasing outdoor snapshot of a person or domestic pet is not infrequently marred by an unattractive background, in which case the trouble can be remedied by substituting a new background for the old. These few hypothetical examples suggest the possible value of composite photography to pictorial workers who are concerned with getting a thoroughly harmonious and effective rendition of a chosen theme rather than a strict record of a given scene. Another field where a composite image often plays an important part is in com-



FIGURE 2

WILLIAM S. DAVIS

mercial work, especially in the production of advertising-designs, wherein a picture of the advertised product is frequently let into a pictorial setting. When you see, let us say, a design of a child happily spooning down Blank's Breakfast Food, it is likely that the image of the food-carton—prominently displayed on the table—was added after the advertiser's acceptance of the original photograph. It is also quite within the realm of probability that more than one make of motor-car has been photographed at the factory and a cut-out print imposed upon a stunning picture of a steep mountain road, as a means of suggesting in a vivid manner the

climbing propensities of said car! And, at that, this does not imply that the car couldn't perform the supposed "stunt", for it might be quicker and easier to add the image of the car to a good scenic print than to take a car to a suitable locality for the purpose of photographing the ensemble. So much for the uses to which composite photography may be put. The next thing is to tell how the work is done.

Some Points to Consider in Selecting Parts for Combining

One thing that is quite essential to harmony is to have each unit lighted from very nearly the same direction. It simply won't do to take in hand a landscape which contains cast-shadows coming from one side and add clouds lighted from the opposite side, or showing an against-the-light effect. When, however, it's just a case of right and left-hand lighting, it is often possible to print one of the negatives reversed, and thus make the effect come right. Congruity of subject-matter is another essential—*i.e.*, the units used must by their character fit well together. For instance, wind-swept clouds above a summer sea or placid lake *do not* constitute a plausible combination. This is a matter entirely independent of pictorial fitness as measured by the tones or lines of the masses, which must be determined



FIGURE 3 SUMMER PASTURAGE

WILLIAM S. DAVIS

by the taste of the worker and his experience.

Where an object whose approximate size is familiar to everyone is to be introduced in a scene, the matter of relative scale and perspective of the object and its surroundings are factors. In other words, the size of the image and foreshortening of the object should appear as it would had the object actually been photographed at the point selected in the new setting. If a human figure was posed, say, twenty feet from the camera, the image obtained from this distance should be placed in a plane of the new setting which lay at very nearly the same distance from the camera. Merely reducing the size of the image will not render it available for introduction in a plane a hundred feet from the lens, for the reason that the foreshortening changes with each material change in distance of viewpoint. When using an image of a near object, the height of the viewpoint from which it, and the new setting, was made should be approximately the same—then if placed at the right height in the scenic setting, the perspective of the whole will be true.

Using the same size camera, and a lens of the same focal length, for photographing each part greatly simplifies the work, since all the images that are made at the same distance from the material will be upon a uniform scale. This point is illustrated in the components (Figures 1 and 2) used in producing the composite shown in Figure 3. By retaining in the combination the relative scale of both images, all that was needful to render the effect truthful was to have the cow's feet touch a spot in the landscape corresponding to the distance at which the cow stood from the camera when photographed.

One need not adhere quite so rigidly to the rule laid down regarding the height and distance of the viewpoints for separate parts when the objects that are used for printing-in were photographed from a fairly remote standpoint, and are used only for insertion in the middle-distance of a scene. Thus, a flock of sheep photographed at a distance of a hundred-and-fifty feet might, by suitable enlargement or reduction of the image, be introduced into any plane of a landscape from about a hundred-and-twenty-five to two-hundred feet distant from the eye without the slight discrepancy in perspective, or foreshortening of individual animals, being noticeable.

A practical feature worth noting here is that it is much easier to make a good job of fitting parts together when the images are sharp than where the definition is diffused, particularly when masks have to be used. When a soft-focus image is wanted in work of this kind, it is best obtained by making a new negative with a soft-

focus lens from a sharp composite print or transparency. This point should be kept well in mind.

The points referred to above have been dealt with at some length for the purpose of showing the possible causes of unsatisfactory effects, and their prevention, rather than with any wish to convey the impression that it is difficult to fulfill the conditions needful to ensure success. As a matter of fact, any observant worker possessed of good taste should be able to turn out well-constructed composite photographs, assuming he or she has a reasonable amount of knowledge concerning the ordinary technical processes of developing and printing.

Since the technical resources of different workers differ, to say nothing of the fact that methods should be adapted to the result desired, we will now take up one by one a number of different methods of making composite pictures, and leave it to the interested reader to choose the method, or methods, which seem best suited to individual needs.

Composite Contract Prints

THE SHADING METHOD. When it is a simple case of adding clouds to a seapiece or landscape with well-defined outlines, the first step is to shade the sky-portion of the scenic negative, while printing, with a piece of card cut to correspond roughly with the contours of the skyline, keeping the card moving up and down about half-an-inch to give a vignetted effect instead of a hard line. The object of this is to keep the sky white, as a tint at this stage would dull the brilliancy of the clouds that are to be added. If the sky-portion of the negative happens to be dense enough to obstruct the light well, it need not be shaded during printing. Having exposed the first negative, the one which contains the clouds is substituted, and the portion of the print already exposed protected by shading while the clouds are printed-in.

To allow for shifting the position of the cloud-negative when adjusting the position of the clouds to the landscape, it is advisable to use a size larger printing-frame, fitted with a clear glass to support the negative. The proper placement of the negatives can be determined by superimposing them and observing their images before a strong light, or prints from both may be placed side by side and a note made of the amount of shifting necessary to make the parts come together properly. The position of the skyline of the scenic negative should be indicated by marks on the face of the printing-frame, to guide one in holding the shading-cards. Also, the sheet of printing-paper should be kept in the same position to prevent displacement of



FIGURE 4

WILLIAM S. DAVIS



FIGURE 5 CONTENTMENT

WILLIAM S. DAVIS

the image relative to these guide-marks—an object easily accomplished by forcing the sheet into one corner of the printing-frame.

If the scene contains dark masses along the skyline, a little overlapping of the images will do no harm—indeed, light clouds may be printed right over a dark tree or boat-sail which cuts against the sky.

When paper other than the printing-out variety is employed, trial-strips should first be exposed under each negative to ascertain the correct relative exposures called for. If this is not done, one will very probably find one part developing faster than the other.

MASKING AND BLOCKING-OUT METHODS. These are commonly employed when the contours of the parts to be joined are such that greater accuracy is necessary than that obtainable by the use of shading-cards. Also, when an isolated object or group is to be placed in a new setting. The easiest way to produce the masks is to make a print of the subject whose outlines must be followed upon printing-out paper, such as "Solio" or some self-toning brand—then, after cutting out the parts as required, the pieces of paper can be darkened by simply exposing them to light. Gaslight or bromide-paper can be used for the purpose by drying a developed, but unfixed, print; then, after cutting, developing the parts until black.

The masks may be used between the negatives and sensitive-paper, if very sharp outlines are wanted; but, as a rule, they are adjusted upon the back to soften the effect slightly. This would make very little difference with film-negatives; but when these are used, the outlines of the masks can be made to print more diffused by attaching the masks to pieces of plain glass.

Blocking-out serves the same purpose; but instead of employing paper-masks, such portions of each negative as are not required are painted out with water-color "opaque" or a red or brown oil-paint.

Making a good print, technically, rests upon obtaining perfect registration of the masked or blocked-out parts, so that the blank space left after printing the first negative will be exactly filled by the image that is inserted from the second. If the composite picture is made upon a paper which yields a visible image during exposure, correct register of the second impression may be obtained by holding the printing-frame up to the light; and, while looking through the paper and the negative, moving the former about until no light-line is visible around the opening in the mask. With any other kind of paper the correct position for each negative must be determined in advance. For this reason a printing-

board, similar to what is used by multiple-gum workers, is usually preferable to the ordinary printing-frame. Any perfectly flat board covered with blotting-paper will answer the purpose. The negatives, with masks attached, are laid one over the other upon the board and shifted about until the openings in the masks coincide, when the position of each negative is indicated by pencil-lines upon the blotting-paper. Then the sensitive-paper is laid face up upon the board and kept from slipping by gumming two of the corners, after which the negatives are replaced one at a time and the exposures made, proper contact between the paper and negative being obtained by covering the latter with a sheet of glass of larger size and pressing this in place with push-pins or spring-clips. Another method of getting correct register, when using bromide-paper, is to develop the first exposure until the details are just distinct; wash the print in several changes of water to stop the action of the developer, squeegee face down upon clear celluloid to keep the damp surface from coming into contact with the second negative used—then register by visual observation in the manner already described. The wet emulsion will require approximately double the normal exposure, after which the whole print is developed to full strength.

Composite Enlargements, Direct

For several reasons, it is preferable to make composite prints by enlarging rather than by contact. For one thing, when a focusing-enlarger is employed, it is possible to alter the relative size of the parts, if desired, and if the apparatus is designed to hold the bromide-paper upon an easel it is easier to obtain good registration, as the projected image is always in sight. As in contact-printing, different methods of manipulation may be used.

SHADING THE IMAGE. Cloud-effects can, in many cases, be added by shading the parts one does not wish to have print in the same manner as in contact-printing. The only difference is that when the sensitive-paper is upon an easel the shading-cards are usually held near the paper instead of behind the negative.

USE OF MASKS. If all the negatives used to make the composite image are enlarged to exactly the same degree, masking or blocking-out can be done upon the negatives. A favorite way, however, is to cut masks to fit the enlarged images, and place them over the sensitive-paper while making the exposures. A mask made to cover an isolated section of the image is best held in position without casting a shadow upon surrounding parts by gumming it to a sheet of clean, clear glass large enough to cover the

sensitive-paper. Masks may be made by cutting up an enlargement, or the images projected upon sheets of orange "post paper" and the outlines for cutting traced with a pencil.

Registration can be obtained by proceeding as follows: After the first exposure is made, and while the mask used is still in place, put an orange-glass cap over the enlarging-lens—this allows the image to be seen without affecting the paper—change to the second negative and get the section of the image wanted from this correctly located, then place the required mask in register with the first one and remove the latter.

SEPARATE DEVELOPMENT OF EACH EXPOSURE. This is frequently useful, taken in conjunction with masking, and in some instances enables one to dispense with masks. Clouds, for instance, can be added to a scene by exposing and developing the subject in the usual manner, simply taking care to shield the sky-portion, if thin. After developing the image to full strength, the paper is well washed; superfluous water removed by placing between blotters; then, without fixing, it is replaced upon the easel and while the lens is covered with the orange-glass cap the cloud-image is located, and next exposed, not forgetting the longer exposure required by the damp coating. After this, the print is laid upon a sheet of glass and the sky-portion developed *locally* by applying the developer with a swab of cotton. A point to remember is that the timing of the exposures should be so adjusted that both images will take about the same length of time to develop to the desired depth, for if one image develops much quicker than the other it is likely to be a warmer black. When masking is necessary, registering the masks is sometimes rendered much easier by developing the portion first exposed until the image is just visible. This affords a guide in placing the mask for the second exposure, and in locating the image properly; then, after this exposure is made, the entire print can be fully developed. If care is taken to so time the exposure of the first section that full development is required to ultimately bring it up to the required strength, the portion exposed last will catch up with the first, even though the latter has the advantage of having been partially developed at the start.

Composite Negatives

If more labor than usual is entailed in producing a satisfactory composite image, or a number of exact duplicates may be needed, the wisest course is to make a negative of the composite image and thus fix permanently the effect. Here are several ways to attain this end.

COPYING FROM A PRINT. When a negative no larger than the size one's camera will make is sufficient, an enlargement which shows the exact effect wanted should first be made. Of choice, this should not be less than twice the size of the finished picture, and upon a smooth mat or semi-mat paper to render the image as free of "grain" as possible, yet have a surface which can be readily retouched or "spotted," if necessary. This print must be kept smooth and flat while being copied, say by mounting solid upon a sheet of heavy, smooth-surfaced, cardboard or by placing under a sheet of clear glass in a frame. An alternative method is to paste it to a sheet of strong paper which has previously been stretched upon a drawing-board. After it is in condition to work from, the enlargement is placed at right-angles to the camera-lens and the image focused. Diffused daylight, such as is obtainable when the print is set up several feet from a window, is as good a lighting as can be had; but should artificial light be preferred, an electric lamp may be placed on each side of, and at a little distance from, the print, care being taken to screen the light from the lens.

The camera used must permit focusing upon quite near objects to obtain an image of the requisite size; but, while it is preferable to have bellows long enough to permit of using the regular lens, the focal length of the latter can, if necessary, be shortened enough to make up for the lack of a long bellows-extension by capping with a supplementary lens called a "copying-attachment". To ensure good definition throughout, it is best to stop down the lens to about F/16, or smaller if a supplementary lens is used.

Slow plates or cut films are the best to copy prints, good examples of this type being the Hammer Slow plate and Eastman Commercial film. Any ordinary developer will usually give enough contrast, if the exposure has been correctly timed; but should there be a tendency toward undue flatness, it can be overcome by using a stronger developing-solution which contains an extra dose of bromide, or, instead, a hydrochinon developer similar to the following:

| | |
|-------------------------------|-----------|
| Water..... | 4 ounces |
| Hydrochinon | 10 grains |
| Sodium sulphite (dried)..... | 40 " |
| Sodium Carbonate (dried)..... | 40 " |

Bromide up to two grains can be added, if still greater contrast is called for.

The correct exposure is best found by experimenting under fixed conditions; then, by adhering as closely as possible to these conditions in future the matter of exposure will cease to be a problem.

MAKING "PATCHWORK" PRINTS FOR COPYING. When a print serves only as a means to an end—that of making a new negative by copying as above described—it is feasible to combine parts from several prints by cutting out very carefully the sections wanted and pasting them to a foundation print. This was the procedure adopted in producing the composite pictures marked Figures 3 and 5. In making the composite print for Figure 3, an 8 x 10 enlargement of the landscape shown in Figure 1 was first made. An enlargement of the cow alone was then made to the same scale and the print, when dry, placed upon a piece of glass and the image cut out with a sharp pocket-knife, when it appeared as in Figure 2. Next, the print was turned face down, the edges slightly moistened with water, and gently scraped until they were made as thin as possible without damaging the image, the object of this being to cause the cut-out to lie close when pasted down. In the meantime, the landscape-enlargement had been made ready by pasting to a sheet of smooth drawing-paper strained tightly upon a drawing-board—a result obtained by dampening the drawing-paper and turning the edges over upon the back of the board before pasting them down. The next step was to paste the print of the cow in the proper position. The joining proved to be so nearly invisible that hardly any touching-up around the edges was needed; but the cast-shadow of the cow was worked in with soft pencil and stump, the shape of the shadow being copied from that in the original setting of the cow-study. The new negative from this "patchwork" print was made upon a Hammer Slow plate, exposure sixty seconds, stop F/16, with print set up about six feet from a north window.

The same general procedure was adopted in making the sheep-picture, except that in this case the foreground and middle-distance contained in the negative of the sheep was retained and the print from this cut, as indicated by the dotted-line in Figure 4. The lower section was then pasted over the print which contained

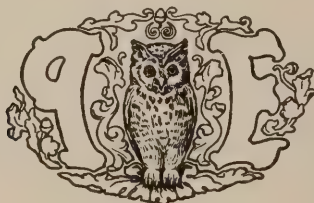
the clouds and distant trees, producing the finished result illustrated in Figure 5.

NEGATIVES FROM COMPOSITE TRANSPARENCIES. This is doubtless the best means to get a negative as filled with minute detail as possible and with a practically grainless image which will stand a high amount of enlargement. The first thing, with this method, is to make separate positives of each part upon either special "transparency" plates, ordinary slow plates or slow cut-films. These can be made with a focusing-enlarger to whatever size seems best, or a copying-camera used the same as for lantern-slide making. As the positives should be bound up face to face, to bring their images into contact, it is necessary to reverse one of the negatives when printing.

The usual masking or shading-methods may be employed to eliminate from each transparency the material not required; or, in cases where the outlines of the parts to be joined are simple to follow, extraneous parts of the images can be removed by the local application of a strong ferricyanide reducer.

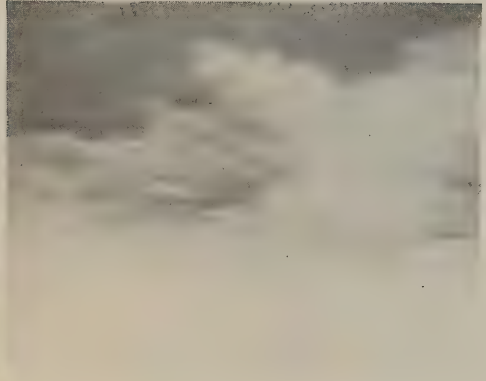
Figures 6 and 7 show the appearance of separate transparencies which, in combination, produced the effect presented in Figure 8.

Finished negatives from composite transparencies are made in the same manner as the transparencies themselves, *i.e.*, by means of either a copying or enlarging-outfit. If copied in the camera, a sheet of groundglass should be fastened in a window and surrounding parts blocked-out with brown paper, or other material, to shut off the illumination outside of what passes through the groundglass. The transparency is then fixed in a frame a few inches in front of the groundglass and its image focused to the required size in the camera. When an enlarged negative is needed, the transparency is simply put into the kit usually occupied by a negative and the image projected upon a plate or cut-film instead of the usual bromide-paper. Slow plates or Commercial cut-films are suitable for negative-making from technically well made transparencies.





FIGURES 6 AND 7



WILLIAM S. DAVIS



FIGURE 8 ON LONG ISLAND SOUND

WILLIAM S. DAVIS

Questions and Answers in Darkroom-Procedure

ED. C. JERMAN

[Through the courtesy of the Educational Department of Victor X-ray Corporation, Chicago, we are enabled to reprint a paper which was prepared under the direction of Ed. C. Jerman, Technical Director of the corporation. We believe that our readers will find much of practical value in this article. Although the writer addresses himself to workers in an X-ray laboratory, what he says will apply, to a great degree, in any darkroom. EDITOR.]

1. *What is the function of the developing-solution?*

Answer: The developing-solution oxidises the silver bromide which has been energised by exposure. In other words, it changes the latent image of an exposed film to a visible image.

2. *What chemicals are ordinarily used in an X-ray developing-solution?*

Answer: Metol or a suitable substitute. Hydrochinon, Sodium Sulphite, Sodium Carbonate, Potassium Bromide, Distilled Water.

3. *What is the purpose of each of the chemicals?*

Answer: Metol, or its substitute, is a powerful oxidising-agent which functions to give detail or definition.

Hydrochinon is also a powerful oxidising-agent which functions to give contrast by producing dense blacks.

Sodium Sulphite functions solely as a preservative of the developing-solution, thereby prolonging its life.

Sodium Carbonate is an alkali which accelerates development by opening the pores of the emulsion, allowing freer access of the oxidising-agents to the exposed Silver Bromide particles.

Potassium Bromide functions as a restrainer, preventing too rapid development. It also prevents fogging of the transparent areas.

Distilled Water functions as a solvent, holding the chemicals in solution.

4. *In what order should the chemicals be dissolved?*

Answer: They should be dissolved one at a time in the order listed. When using standard package developer, follow the directions on the label.

5. *At what temperature should the chemicals be put into solution?*

Answer: At about 120° F., in order to ensure thorough solution, and to prevent any precipitation.

6. *Why should distilled water be used for developer?*

Answer: Because there is always danger of

tap water containing injurious chemicals.

7. *Should newly made developer be put into immediate use?*

Answer: Newly-made developer may be immediately used, but better results will be obtained if the solution be allowed to stand for a few hours.

8. *What is the cause of the lowering of the tank-solution level?*

Answer: This is caused by the removal of the films and by evaporation.

9. *How should this condition be remedied?*

Answer: By the addition of fresh developer, not by the addition of water.

10. *May stock developing-solution be kept in bottles for future use?*

Answer: Yes, if kept in full bottles well stoppered.

11. *Is it advisable to add chemicals to strengthen an old solution?*

Answer: No, the old solution will quickly oxidise the new.

12. *How may a variation of the quantity of the chemicals affect the end result?*

Answer: Any variation of the quantity of the chemicals breaks the balance, thereby bringing about a proportional change in the end result.

13. *How may a variation of the quality of the chemicals affect the end result?*

Answer: Any variation of the quality of the chemicals breaks the balance, thereby bringing about a proportional change in the end result. A variation of the quality may introduce objectionable foreign chemicals.

14. *Should developer be stirred from time to time?*

Answer: Only slightly when adjusting temperatures, or when new developer has been added to bring up the level of the tank.

15. *What is meant by the term "Oxidised developer?"*

Answer: An oxidised developer is one which has absorbed a sufficient amount of oxygen to impair the end result.

16. *What is the effect of an oxidised developer?*

Answer: An oxidised developer slows up the development process, has a tendency to produce stain, and lessens density and contrast.

17. *Are oxidation-troubles greater with tray-development than tank-development? Why?*

Answer: Yes, because with trays a larger surface of the solution is exposed to the air.

(To be continued.)



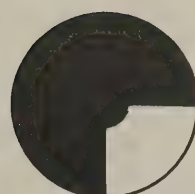
180°



170°



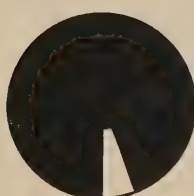
135°



90°



45°



20°



5°



CLOSED

SHUTTER-ANGLES

HERBERT C. MCKAY

Practical Kinematography

HERBERT C. MCKAY

(Book Rights Reserved)

Chapter IV



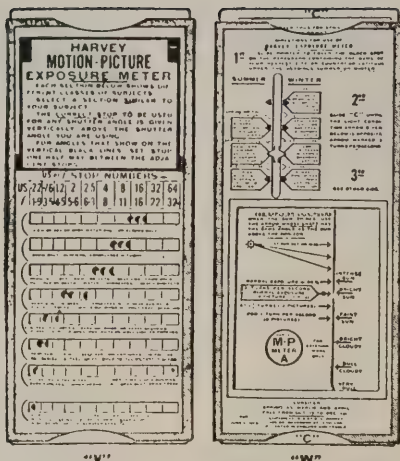
HAVING selected the camera best suited for your purpose, the next thing is to learn to operate it properly. The instructions given in "Kinematography for the Amateur" if properly followed will give a mastery of cranking, which is necessary before good pictures can be made. Threading is also simple, if the instructions of the camera-manufacturer are followed. We will assume that threading and cranking have been learned thoroughly, and that we are ready for the actual camera-operation.

The camera selected will probably have a full set of accessories, "effects", and an automatic dissolve or at least an adjustable shutter. The first thing to do is to learn the exposures for the different angular openings. The following table is nearly enough correct for all practical purposes, and is calculated for normal speed of sixteen per second.

| Shutter opening | Fraction of second exposure |
|-----------------|-----------------------------|
| 180° | 1/32 |
| 170° | 1/43 approximately |
| 120° | 1/48 |

| Shutter opening | Fraction of second exposure |
|-----------------|-----------------------------|
| 90° | 1/64 |
| 60° | 1/96 |
| 45° | 1/128 |
| 30° | 1/192 |
| 20° | 1/288 |
| 15° | 1/384 |
| 10° | 1/576 |
| 5° | 1/1152 |
| 3° | 1/1920 |
| 2° | 1/2880 |
| 1° | 1/5760 |

An opening of less than 5° is unnecessary and impractical because it is rarely that sufficient light will be available for even this opening. Conversely, there are few ordinary objects which offer themselves as subjects for the kinematographer, which move with such rapidity that a shorter exposure than approximately one one-thousandth of a second is required. In calculating exposures with the kiné-camera it must be remembered that the shutter works with the efficiency of a focal-plane shutter, which means that exposures should be only about two-thirds of the normal exposure for a diaphragm-shutter.



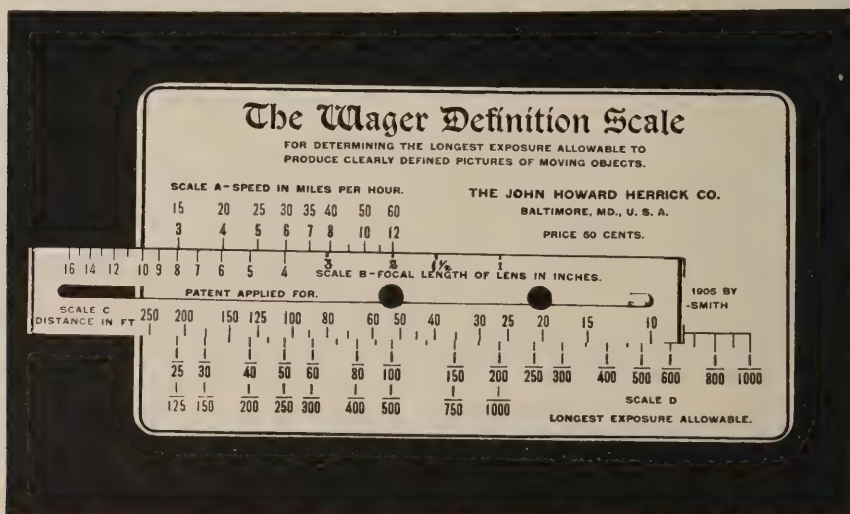
HARVEY M-P EXPOSURE METER
HERBERT C. MCKAY

If there is available space, the foregoing table should be carried in the camera or in the carrying-case. It will however, be remembered that the shutter is not closed to compensate for existing light-conditions; but is necessary only when a rapidly-moving object is being photographed. The function of the adjustable shutter is to overcome blurring of the image due to rapid motion of the subject. Although this is true, the smaller the opening in the shutter, the less light is admitted, so that when the shutter is closed for any reason this fact must be taken into account in determining the diaphragm-opening to be used.

The calculation of exposure is an operation which requires care and experience, and even

these are useless when conditions are abnormal. I have found that it is always well to make use of a good exposure-meter. Personally I use the Harvey, which is illustrated on this page. This meter is used as follows. In the first illustration the small pointer is set to indicate the approximate geographical location in either the "Summer" or "Winter" column. Next the large slide is set so that the existing light-condition is opposite the arrow marked "2 turns per second", or other appropriate point. The meter is then turned over and this displays the surface shown in illustration number two. Here will be found a number of vertical columns corresponding to different stops, with each column divided into sections corresponding to various subjects. This gives a series of little square windows, and if there is any proper exposure for the combined stop and subject, a cut of the shutter will be seen, showing the proper angle. If you have a fixed shutter, determine the stop at which your subject will require the 180° opening. I have never had a failure due to incorrect exposure when using this meter.

If you are not sure of the proper speed to use to stop certain objects, a definition-scale, such as is here illustrated will be of value. This gives the shutter-speed for different subjects at various distances and angles from the camera. It must be remembered that rapidly-moving objects are photographed more easily almost head on. To make broadsides of a racing-automobile, for example, the camera should be at least two-hundred feet away, unless there is light enough to admit the use of the shutter closed to less than 45°.



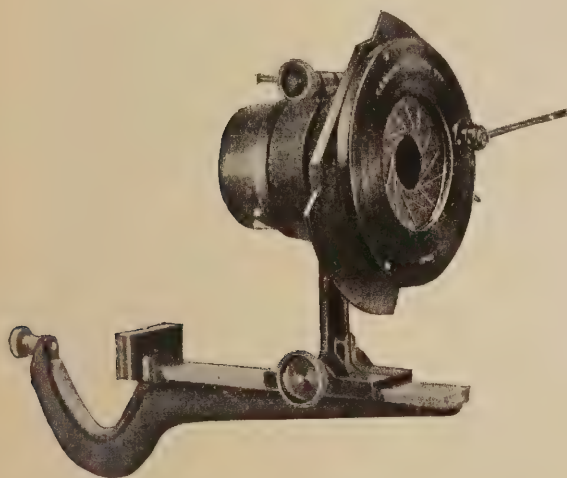
DEFINITION CALCULATOR

HERBERT C. MCKAY

For reference I will give some approximate speeds of common objects.

| | |
|---------------------------|--------|
| Automobile-racing..... | 80—120 |
| Boats, racing motor..... | 40—60 |
| Battleships..... | 12—16 |
| Boat, ocean liner..... | 20—22 |
| Boat, canoe..... | 4—5 |
| Boat, rowing race..... | 10—12 |
| Boat, sail..... | 6—9 |
| Children at play..... | 4—5 |
| Children running..... | 5—7 |
| Diving..... | 8—10 |
| Horse, trotting-race..... | 20—30 |
| Jumping..... | 20—30 |
| Freight trains..... | 20—30 |
| Express trains..... | 40—60 |
| Running man..... | 8—12 |
| Running dog..... | 15—20 |

The hands and feet in athletics move very rapidly, a boxer's hands sometimes attaining a speed of sixty miles per hour. If you are filming a boxing-match, try to stop the arms, partially at least. In a recent film of a world champion-



GOERZ IRIS

HERBERT C. MCKAY

ship fight, the motions were not stopped. Consequently, although the bodies of the boxers photographed plainly and all ordinary action was shown plainly on the screen, the blows could not be seen. The effect was peculiar.

When the subject is moving toward the camera at an angle of 45° , $\frac{3}{4}$ of the actual speed is used in calculation, if the included angle is but 30° ; base the calculation on one half the actual speed, and, if the motion is directly toward the camera, calculate the exposure for an object moving at one-fourth the actual speed of the subject.

The next point of interest is the visual focus. Set up the camera and carefully focus upon some subject and make a test-strip a foot or two long.

Develop this in the darkroom and then examine it carefully. If it is not sharp, make further tests until you are sure that it is not your eye which is at fault. If there is an actual discrepancy, see that the elements of the focusing-magnifier are in proper position and that the groundglass fits the aperture properly. If this does not remedy the defect, the matter should be taken up with the manufacturer.

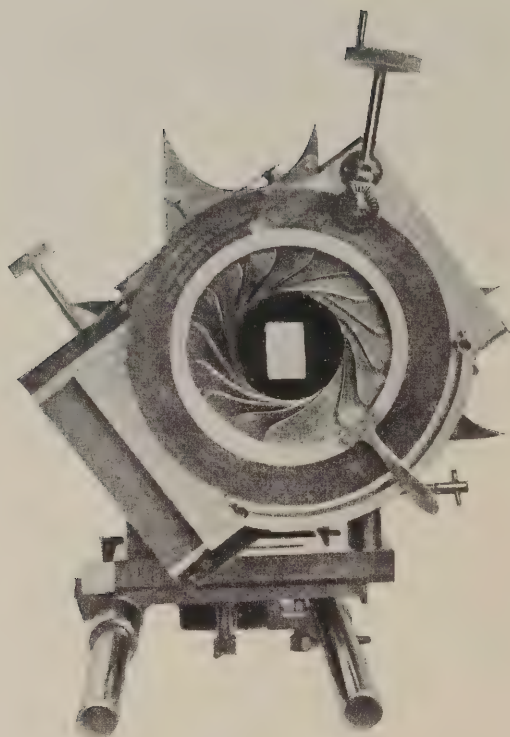
When assured that the visual focus is the focus which is obtained upon the film, check the calibration of the focusing-jacket of the lens. Set up targets of some kind, which bear some design which will facilitate focusing, and measure from the plane of the lens-diaphragm to these targets, placing the target successively at the distances marked upon the lens-jacket. At each given distance, the target should be sharply focused at full aperture, by setting the indicator of the focusing-jacket opposite the given distance. If this does not occur, the entire lens-mount is probably out of relation with the camera-body. Examine it to see if it is loose in the flange. By making sure that the lens-mount sets properly into the camera-box, the calibrated scales will usually coincide with the visual check. If not, take this up with the manufacturer of the camera.

You will need certain filters. We are familiar with the problems of orthochromatism as met with in still-photography and the use of colored gelatin-films to correct the incorrect color-rendition; but the filter used in kinematography serves a far different purpose. One, indeed, is not used on the camera at all.

There are on the market various focusing-filters, designed to be used with all lenses which have a chemical focus which does not coincide with the visual focus. The blue filter shuts out all but the blue light-rays; and, as these approximate the chemical rays, a focus obtained while looking through one of these filters is usually correct. Such a filter is useful in working with an F/1.9 lens, as these lenses are prone to have the chemical focus at a variance with the visual focus. It is not, however, necessary to pay a high price for a fancy filter. A Wratten & Wainwright "C" filter, bound between two bits of lantern-slide cover-glass, does very nicely, and the cost is about twenty-five cents.

Another useful filter is the diffusing-filter. This filter is the same as an auxiliary soft-focus lens; but it is mounted in a square, filter-style, instead of in a metal cell, as lenses are mounted. It is carried in the mask-box, and gives very nice effects with close-up objects.

A third filter is strong yellow around the edges and graduated to clear transparency at the center. A close-up with this filter will give a sharp figure



THALHAMMER DEVICE HERBERT C. MCKAY

in the center of the frame but the frame—in the print—gradually darkens toward all edges. Remember that yellow on the filter darkens the print, for yellow holds back the light. It under-exposes the negative which will print dark on the positive.

Another is the fog-filter which gives an effect as though the picture had been made during a heavy fog. To obtain such scenes it is not necessary to work the company in a dank, dismal fog, just insert the fog-filter and you are ready to shoot.

The list might be continued indefinitely, for it seems that a new filter is being introduced every day or so; but the foregoing will give some idea of the filters and their uses in cinematography. A graduated diffusing-filter, a graduated yellow filter and a fog-filter will do very well for a beginning. Others may be added as occasion requires. You will also want the focusing-filter, if you have a lens whose foci do not coincide.

The news-kinematographer, will, all things considered, use the iris more often than the fade. The iris is a large iris-diaphragm which sets in front of the lens, being attached to the usual "effect" support. This diaphragm is manually operated and gives an effect upon the screen of a gradually opening or closing circle, which dis-

plays or conceals the actual scene. This effect was widely used at its first introduction; but in dramatic work has been largely succeeded by the fade-in and fade-out. The iris-in and iris-out are very effective in scenic works, especially when some distinctive part of the scene is so situated that it lies in the center of the circle.

The reason, or at least one reason, that the iris gave place to the fade was that often the principal actor was so placed that after he had disappeared, some trivial detail had the screen to itself, and as often happened, this detail was of some more or less humorous nature, and this disturbed the continuity of emotion in the audience. Likewise, the displacement of the circle on the screen, to iris-out on the principal actor, no matter where he might be placed, gave a sense of disturbed balance, so the iris was abandoned and the fade brought into use. However, for scenic, or similar work, where the above considerations have no place, the iris can be used more effectively than the fade; and, an added advantage is that in case of need, the amateur can construct an iris from one of the large iris lens-flanges which are used to accommodate different lenses in one lens-board. Such an iris can be made for ten or twelve dollars and is quite satisfactory, whereas there are few shutter-dissolves which can be purchased for as little as one hundred dollars.

There are times when the fade is almost indispensable. This is even more true when you attempt making advertising and sales films. In fact, many of your customers will insist upon the fade, for people like to have a finger in the pie whenever there is anything mysterious being done, and the mechanism of the fade is a mystery to most people. The necessity for fades in your film does not necessitate the use of an automatic fading mechanism. Although the automatic shutter dissolve will give a nice, uniform fade with a minimum of trouble, the effect can be duplicated by manually operating the lens-iris. Cameras, such as the Ertel and the De Brie, which have the iris operated by extension-rods, make a manual dissolve almost as easy as an automatic. A good length for the dissolve is four and one-half feet, or nine turns of the crank. Determine the working-aperture of the iris, let us say it is F/8. Now close the iris as tightly as possible; but do not force it as the iris leaves are very thin and fragile. The iris will now be set at F/64 or smaller. Set up the camera, and get everything in readiness to shoot. Now place your left hand over the lens and crank a turn or so, then remove your hand as you start cranking sixteen, and immediately begin moving the iris control-rod at a rate which will bring it to

the F/8 mark when you have turned the crank nine times. When ready to fade-out, close the iris at the same speed and when it is closed as far as it will go, quickly place the hand in front of the lens and the fade-out is complete. With a little practice, manual fades can be made in this manner which will compare favorably with the results of the best dissolving shutters.

Of the "effects" you will probably use only the multiple exposure-device, or the double-exposure device, according to the amount of trick-work you have to do. The square-closing

dissolve is an effect which is rarely used, principally because it is not artistically compatible with good composition, and the usual action of the screen-drama. Personally, I seldom use anything but the iris and shadow-box. For multiple exposures I use the masks in the mask-slot, which permit much finer workmanship, or I make the masks as they may be desired by painting shapes on glass-slides for the shadow-box, using ordinary opaque laid on quite thickly, for pigment. This is easily removed by washing with water, so that the slides may be used over and over.

(To be continued.)

Outdoors with a Camera

CLAUDE P. FORDYCE

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Part I. Choosing the Right Outfit



PHOTOGRAPHY is an established adjunct to recreation of any kind. Its popularity is in answer to the unusual fascination of recording our most enjoyable experiences and environments so that when the vacation is past we can live the trip over again in happy retrospection, and this has its appeal as well as the anticipation and realisation. Next to the enjoyment of viewing scenery, is photographing it.

The hobby can be put to practical use, as, for instance, in the good cause of game-conservation as has been done by S. N. Leek of the Jackson Hole whose vivid portrayal with the camera of the starving elk, as they came into the valleys in winter, did more towards having the elk cared for by the Federal Government than any other thing. And who does not experience the thrill of pictorial mementoes of camp-fire friends, big game or piscatorial beauties, and charming bits of the wilderness?

One of our most successful big-game hunters spends over a thousand dollars on a trip and gets his bear or sheep; but his photographs are a failure. It is estimated that the average amateur gets about twenty-five per cent. of good results for his photographic efforts and, yet, it is as easy to get good pictures as poor ones. Success depends as much upon the individual as upon equipment; and our present purpose is to plan the right selection of equipment and to show how to use it. Many recent advances have been made, particularly in color-photography and in amateur motion-picture work, both of which are worthy of adoption by the outdoor-man. But

no matter what the outfit may be, do not be one of the great army of snapshooters; it is the serious photographer who gets the results.

Outdoor-photography is done under such a diversity of light-conditions and is further complicated by such contrast of colors that a very rigid, but easily mastered technique, is imperative. I remember coming to Morning Eagle Falls in Glacier Park late one afternoon—the Falls faced north and were shaded heavily by the serrated Garden Wall to the west—this was my only opportunity for a picture and I took it; but Lawrence Linsley who was with me and who was photographing for railroad-advertising noted the time when the light would be right, returned next day and obtained a wonderful negative. Thus the hurried traveler has only fleeting opportunities and must make the best of them, even if they are not always ideal.

Again, our party had sighted mountain-goats, high on a ledge west of camp, and Raymond Coursen and I started upward for them; he was ahead of me with camera ready; and, rounding a projecting rock, he obtained the photograph here shown. Having my camera ready for quick use was my only salvation when getting the Yellowstone elk; for the instant after my shutter clicked he jumped off into the brush. Last summer, at a rodeo in the Jackson Hole, there was a splendid opportunity for speed-work. It was cloudy most of the time, I had used up my speed film and had to rely on ordinary film but I obtained fair results by having the camera close to the ground making a sky-background.

As the amateur cannot choose his light, he



WHICH SHALL IT BE—V.P. OR 5X7?

CLAUDE P. FORDYCE

must make his exposures and hurry on, hence it is all the more imperative that he understand his outfit, focus correctly and give proper exposure—erring, if at all, on the side of overexposure; for correction can be made in printing but one can never print in details which the negative fails to show.

A story is enhanced a hundred-fold by inserting some human-interest pictures—a photograph of a beautiful scene is vastly improved by having people in it. The picture should tell a story—a genre-picture. In the photograph of a man holding a fish, which 'maybe' he caught, he is obviously posing; better were his attention on the fish—action in a natural habitat background. In composition, much depends upon the central feature one is trying to record. Put a prominent tree, or a river running down the landscape, to one side; in open views, put the horizon prominently down to within a third of the space from the bottom. If one wants the foreground prominent, raise the horizon near the top. A common rule is to have the sun at one's back so that the light will not shine on the lens; but one misses the light-and-shade details and the depth and volume of a subject photographed in a cross light.

There has been a reaction from the use of large cameras to the so-called miniature types and these are the best all-around equipment for the outdoor-man. The motion-picture has given us an idea for this—if the cameramen

can get photographs on their very small film, which enlarge to the size of a room, why carry a large camera when one which makes a print $2\frac{1}{4}$ by $3\frac{1}{4}$ inches does as well—one which has a long bellows for close-ups, which is portable and always ready for use? Such a camera fits into a coat or shirt-pocket and is only a small item in the general camping-equipment. Fitted with an F/4.5 lens, the initial expense is larger than in the case of the ordinary fixed-focus camera; but the upkeep-expense of small films quickly makes up the difference. At one photo-exhibition, most of the prints, including the winning one, were made with miniature cameras. They are entirely efficient and easy to operate. I have found it difficult to compose in the small finder and have fitted to the case one of the direct-view finders which does perfectly well. Prints from the miniature negatives are large enough to please most people; but it is so easy to make enlargements—using the camera itself and condensing-lenses—that the contact prints go into my album of master prints simply as proofs and are numbered corresponding to the negative-numbers. After having used every type of camera, I consider the pocket-miniature the best for all-around work—specifically it should be fitted with a first-rate anastigmat lens F/4.5 and accommodate either films or plates to make it available for ground-glass composition and for enlarging and the use of autochrome color-plates by simply adding the special screen before the lens.

The most versatile camera for serious work is the Graflex. As is well known, this camera has a mirror which throws the picture to be made in full size on the ground-glass, right side up to the instant of exposure and thus eliminates the common fault of bad focusing. The other factor which makes this camera in a class by itself is the curtain-like shutter, called the focal-plane shutter, which is the only kind which uses all the light coming in through the lens and thus allows speed-photography up to 1/1500 second. In most cases, this means under-exposure and some permissible blurring of the background; but the underexposure is corrected somewhat in developing. For the outdoor-man nothing compares to this outfit for wild-life and speed-photography; but it is too heavy and bulky for a hard trip; it is expensive and has a rather intricate mechanical construction. I have found it difficult to make satisfactory time-exposures with this camera as the heavy shutter-action jarred the camera. Hence, I substituted a lens-cap for this use.

Motion-picture cameras are now made portable for the practical uses of the outdoor-man and it

requires only the ordinary skill in handling any camera—in fact, since the exposure is automatic these cameras eliminate the usual fault of under-exposure. They are made remarkably compact, being no larger than an ordinary postcard-size camera and can be filled in daylight. Enlargements from motion-picture film equal contact prints. There is also in their favor the opportunity to sell reels. At present, the film must be developed by the professional and one company gives this service free when the film is purchased. Projection-machines cost as much as the camera; but there is the opportunity that the local motion-picture theater will run the pictures.

The Sept motion-picture camera consists of two parts—the main body holds the lens and

carried this on skis over the trail in deep snow where the setting of a tripod would be impossible and made pictures above timberline equal in every way to pictures made with the professional outfit.

The Kinamo motion-picture camera is another of the portable type which does everything that the ordinary camera does and, in addition, has the advantage of making motion-pictures which can be shown in the home or sold to companies who want unusual scenes or news-scenes in serials. It weighs but two and one quarter pounds and measures $4\frac{1}{2} \times 2\frac{1}{2} \times 6$ inches. It is fitted with a Zeiss $F/3.5$ lens which can be focused accurately, with a moderate lens-opening, so that everything from six feet and

COMPARATIVE DATA ON VEST-POCKET CAMERAS

| Camera | No. 1 Anseo Super Speedex | No. 1 Auto Kodak Special | Ica Ideal "A"* | Sonnet | Goerz Tenax | Icarette Vest-Pocket |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Size Picture | $2\frac{1}{4} \times 3\frac{1}{4}$ | $2\frac{1}{4} \times 3\frac{1}{4}$ | $2\frac{1}{2} \times 3\frac{1}{2}$ | $1\frac{3}{4} \times 2\frac{3}{8}$ | $1\frac{5}{8} \times 2\frac{1}{2}$ | $1\frac{5}{8} \times 2\frac{1}{2}$ |
| Lens | B. & L. Tessar F/4.5 | B. & L. Tessar F/4.5 | Carl Zeiss F/4.5 | Carl Zeiss F/4.5 | Georz Dogmar F/4.5 | Carl Zeiss F/4.5 |
| Focus | $3\frac{1}{2}$ -in. | $3\frac{1}{2}$ -in. | $4\frac{3}{4}$ -in. | 3-in. | 3-in. | 3-in. |
| Shutter | Acme Speedex 1/300 | Kodamatic 1/200 | Compur 1/250 | Compur 1/300 | Compound 1/300 | Compur 1/300 |
| Roll Film | X | X | X | X | X | X |
| Film Pack | | | X | X | | |
| Plates | | | X | X | | |
| Weight | 13 oz. | 18 oz. | 26 oz. | 12 oz. | 11½ oz. | 13½ oz. |
| Fitted with direct view-finder as well as regular reflecting | | | X | X | | X |

*The Ica Ideal "A" has a bellows-draw of $8\frac{1}{2}$ -inches which permits the widest range of focusing of any of the miniature cameras.

shutter and this attaches to the spring-box which holds the film which is driven through the box by the spring-motor which is released by a button. Thus, it is an automatic exposure-mechanism which needs no crank as most other motion cameras do; and it can be held in the hand, hence eliminating the tripod. The speed is regulated by a rotary shutter and is arranged to make "stills" on the whole length of the film—sixteen and one-half or two hundred and fifty exposures. The outfit weighs four pounds, is $3 \times 4 \times 5$ inches in size, can be re-filled in daylight and is fitted with the standard kinema lens—an anastigmat $F/3.5$ —and is further fitted with an iris-diaphragm and focusing-scale set at universal focus; but which can be set for pictures up to twelve inches from the camera. Albert Haanstad told me that he used this little camera under all conditions during one winter, and covered the activities of the Colorado Mountain Club in skiing over the hills near Denver. He

beyond will be in focus. Perfect enlargements up to 8×10 inches can be made from Kinamo negatives. This outfit uses standard fifty-foot spools of motion-picture film. Exposures are made by turning the crank two turns per second; or, if individual exposures are to be made, the crank is changed to the one-stop movement when each turn will make an exposure. I have seen excellent motion-pictures of elk-hunting, of Yellowstone Bears feeding, of children playing about home, camp-scenes and the first pictures of a newly-discovered waterfall made with this outfit, and the owner sold some of his work to a motion-picture news-company at a good profit. One of the newest in kinematograph cameras is the Ciné-Kodak which is made particularly for amateurs' use; it is compact enough to be carried with convenience, is simple to operate and at less expense than has been heretofore possible for it uses a special film about five-eighths of an inch in width as compared to the professional

film one and three-eighths inch width. It accommodates one hundred feet of daylight-loading film. The special emulsion is developed and then, without printing, is reversed from a negative to a positive. When one buys the film one gets the developing-service with it. The camera measures $6 \times 4\frac{5}{8} \times 8\frac{5}{8}$ inches and weighs $7\frac{1}{4}$ pounds and rests on a light, strong tripod, whose top rotates horizontally and tilts vertically. The camera cranks smoothly and operates continuously for four minutes without refilling. The lens is an anastigmat F/3.5, with a 25 m.m. focus and a 28 per cent. angle of view. The image is shown through a tube-opening at the back of the camera and a special connection of the finder-lens with the focusing-mechanism for the camera-lens, ensures a perfect agreement of images from four feet to infinity. On the back are pointers and dials to set and indicate the lens-diaphragm, the focus and film-footage. The Ciné-Kodak must be purchased with the added equipment of the Kodascope or projector, which may be attached to any light-circuit, with a capacity equal to a thousand feet of standard film which lasts sixteen minutes on the screen, a splicing-outfit to cement sections into a continuous strip, a screen which when opened measures 30×40 inches and the tripod.

The Filmo is an automatic ciné camera made by the Bell & Howell Company which weighs only $4\frac{1}{2}$ -pounds and occupies but $3 \times 6 \times 8$ inches of space. It is carried on a shoulder-strap as easily as a postcard-size camera and can be included as a part of any vacation-equipment. It fills in daylight with 16 m/m Kodak film obtainable at any supply-store. A 100-foot roll of this film is equivalent to 250-feet of standard film. No tripod is necessary with the Filmo Ciné camera, although one can be used if one wants to get into the picture. It is easily held and operated by one hand much like a binocular. One sees the image in the erect position and a touch of the button starts or stops the exposures. No motion-picture is complete without the projector to show the pictures after the camera has recorded them. The Filmo Ciné projector is as radical an improvement as the camera itself. It weighs but nine pounds and folds to $8 \times 11 \times 11$ inches. It projects a picture up to 7×9 feet in size without a flicker and of remarkable depth and brilliancé. In addition to one's own films, film-libraries have already been formed and many standard films, reduced to 16 m/m width are now available for showing. This is an excellent way to do one's "stunt" when necessary to do something at the club or neighborhood gathering in order to entertain or to instruct.

To the average amateur the subject of the lens is confusing. The moderate-priced rapid rectilinear has given way in popularity to the anastigmat; and one is apt to trust too much to the superiority of this lens and neglect proper judgment in its use. The whole secret of the anastigmat is that it is a larger lens which admits more light so that it gives reserve power for poor light; otherwise make the exposures as carefully as one would with a rapid rectilinear. The speed of a lens is identical to the amount of light which passes through it; and when one closes down the diaphragm to F/8 the rapid rectilinear and anastigmat lenses are the same speed if they are of the same focus. The F/8 means the stop or opening of a diameter equal to $1/8$ the distance between the lens and its principal focal plane. The distance between the point where the lens brings the parallel rays to a focus and the lens itself, is its focal length. The nearer the lens is brought to the object to be photographed, the farther back does this focus recede, so that some means is necessary to bring this focus on the plane of the plate or film, and this is done by moving the lens out by means of bellows.

A depth-of-focus table for various distances for a 12 cm. F/4.5 lens is as follows:

| Lens set | | |
|----------|----------------------------------|-------------|
| At | everything will be in focus From | To |
| 6 ft. | 5 ft. 7 in. | 6 ft. 6 in. |
| 8 " | 7 " 6 " | 8 " 10 " |
| 10 " | 8 " 11 " | 12 " 2 " |
| 12 " | 10 " 9 " | 14 " 2 " |
| 15 " | 13 " 4 " | 17 " 8 " |
| 18 " | 15 " 8 " | 21 " 4 " |
| 21 " | 17 " 10 " | 26 " 6 " |
| 30 " | 23 " 9 " | 41 " 8 " |
| 45 " | 32 " 6 " | 75 " " |
| 100 " | 72 " 6 " | Infinity |

A lens which combines great speed (admits much light) great focal length (the exact focusing distance between the lens and plate) and great focal depth (the distance between the nearest and farthest objects which the lens can bring into focus at the same time) is what photographers would like to have; but it is optically impossible to construct. One cannot expect an F/4.5 long-focus lens to give sharp images of both nearby and far distant objects on the same negative with the largest stop. By using a fast lens at full aperture, one can make extremely rapid exposures; but they will be sharp only in those portions so focused, and the objects closer and farther away will be blurred. This is permissible in speed-work; but if it is possible to stop down and give more exposure, then the fault is eliminated. The blurring in speed-work gives the idea of motion.

Certain cameras were built originally for F/8 lenses. Then, there came the demand for high-grade anastigmats and, obviously, a better shutter which would just fit the opening in the middle of the front-board and accommodate the better lens. What is not generally known is that no matter how large a lens may be or how great the speed it may have marked upon it, the maximum opening of the shutter is what really determines the speed or light-efficiency.

If manufacturers would make cameras permanently attached to a tripod, the percentage of good exposures among amateurs would increase from the three-out-of-ten class which now obtains. Decreasing the speed of a lens, by stopping down the diaphragm to get detail, lengthens the exposure. My average exposures are, stop F/16, time 1/25 of a second, and a great proportion are more than 1/25. A tripod is imperative, for few people can hold a camera steady in the hands to permit of more than a 1/25 exposure. One enthusiast says that were he to choose between a moderate-priced rapid rectilinear lens and a tripod or an expensive anastigmat lens and no tripod, the tripod combination would yield on the average a better percentage of good exposures. The tripod enables one to use a small stop and gain greater detail and also use a ray-filter, which further slows down the exposure three or more times.

The best tripod I have seen is imported by Hirsch & Kaye of San Francisco. It is made of channel aluminum-sections which are hinged and held by springs so that when the finger presses the snap on the outer section of the leg, all three sections unfold automatically and snap rigidly into place. To permit tilting of the camera without moving the set legs of the tripod, use an Optipod with its ball (screwed to camera) and socket (screwed to the tripod-head) joint. It also has a clamp to attach to a table, chair or windshield. The handy Kodapod is a ball-and-socket joint with screw for camera and fitted with jaws which are lined with teeth and held together by powerful springs which clamp to the handle of an axe driven into a tree or directly to a tent-pole, sapling or windshield-frame. The self-timer also has a place in the camera-kit; it automatically releases the shutter after any time interval between the limits of one-half second and one minute, thus permitting the photographer to be included in the picture.

Nowadays there is not much question about the advantages of films over plates—films being preferable for the outdoor-man on account of their light weight, their being non-breakable, non-halation, sufficiently speedy for general work and rendering color-values properly. The speed of



CAMERA, OPTIPOD AND SELF-TIMER

CLAUDE P. FORDYCE

emulsions of all plates and films are rated by Hurter & Driffield of England and these numbers are known as H & D numbers. The Harvey Exposure-Meter lists them all. Eastman film is rated at 250 H & D and the new speedy Agfa film rates 400 H & D; and, besides being speedy, it has great latitude. The preferred miniature-camera enables one to use a ground-glass in focusing and both films and plates. Thus I have plateholders for panchromatic and autochrome color-plates, and a film-pack adapter for both ordinary and speed film in my traveling-kit, always ready for use. At home, the adapter serves as a holder for negatives when utilising the camera for enlarging with the aid of condensing-lenses and a powerful Mazda lamp in a light-tight box.

Roll-film can, of course, be developed readily in the field with the daylight transfer-box and tank; but film-pack exposures must be transferred from the pack to the tank in a darkroom. In the field, I fill my solution-cup and place it with the film-pack in a plate changing-bag, thus obtaining darkroom-conditions. When I went into the

colored canyon region of Southern Utah, I took panchromatic plates which rendered the proper values of all colors—they are so sensitive even to red that they must be handled in absolute darkness, and the Lumière Autochrome plates registered every detail of coloration in these marvelously tinted stratifications which tell the earth's story for millions of years past. These color-plates are priceless mementoes and supply the only means to photograph the region.

That very essential accessory, the ray-filter or color-screen is an orange or yellow-colored glass which is placed as a cap over the lens; yet, in reality, it is an adjunct of the film or plate. Its purpose, as is well known, is to equalise the colors of objects photographed by repressing the activity of the powerful blue rays which register on the film much lighter than they are seen by the human eye; and it stimulates the reds and yellows which are really darker than they appear to the eye. Of course, the orthochromatic emulsions of all standard film work very well without a filter; for they are especially prepared to be more susceptible to greens and yellows, but with a screen we tone down the highlights, such as the sky, and expose for the darker parts of the subject. Color-screens retard the amount of light which enters, depending upon the density of the dye used. One which retards the light about three times the normal exposure is about right. The special sky-filter is only one-half colored and the rest of the glass is clear so that only the sky is affected.

Photography in actual colors is an entirely feasible undertaking for the amateur; for it only

requires a technique sufficient to make an ordinary negative and it produces an amazing rendition of color, distance and atmosphere. A special autochrome plate, a special color-filter over the lens and very simple development is all that is needed. The camera must be fitted to use plateholders. Autochromes do not produce colored prints; but the exposed special plate which is developed into a negative and then redeveloped into a positive produces exquisite window-transparencies; and, if made with the miniature-camera are used as lanternslides. I have a whole set made of Zion National Park, Cedar Breaks, Bryce Canyon National Monument, the Grand Canyon and Painted Desert which when thrown on the screen in the home or lecture-hall provide a delightful evening's entertainment. I would advise the beginner first to learn the process with flowers in a greenhouse. The emulsion is not fast enough for speed-work—H & D speed is 2—but when it is made more rapid the motion-picture industry will be revolutionised. My average outdoor-exposures were F/8, one second. I make portraits by flashlight. The plates are sensitive to all colors, hence must be handled in a light shielded by the Virida paper, although I am used to handling them in the dark. In the plateholder is first placed a sheet of black paper and then the autochrome plate with the glass-side *toward* the lens. Thus in exposure the light from the lens goes through the glass-plate, then through the colored starch-grains before it reaches the emulsion. Development is simple.

(To be concluded in next issue)



SAW-MILL RIVER

JAMES OWEN



CROTON POINT

JAMES OWEN

The Westchester County Parks—A Pictorial Opportunity

JAMES OWEN

TO camera-users it should be of interest to know that Westchester County, which adjoins New York City's northern boundary, is developing a great public park-system. In a little more than one year the county launched a large-scale park-program probably unprecedented anywhere in an equal period of time. To carry out this program more than 3,400 acres have been designated as parklands and appropriations aggregating about \$8,800,000 have been made.

Westchester County has superb, natural advantages of location. Its easterly boundary has a frontage of about twenty miles on Long Island Sound and on the west it has forty miles of shore-line along the most picturesque section of the Hudson River from the Palisades to the Highlands. The southerly portion of the county is traversed by rocky, wooded north and south ridges, virtually parallel and separating the Saw Mill River, Bronx River and Hutchinson River valleys. North of White Plains and Tarrytown

lies a delightful hill-country interspersed with many natural lakes and the reservoirs of New York City's water-supply system. This region lies from twenty to forty miles or more north of New York City.

Lakes, streams, marshes, meadows, fields and rocky, wooded uplands, rolling stretches of hill and dale; glimpses of the blue waters of Long Island Sound and countless views of the majestic Hudson; thus has Nature diversified her impress on Westchester County. It is a countryside abounding in Indian legends, colonial and Revolutionary history. The names of Washington Irving and James Fenimore Cooper serve to suggest the richness of its literary traditions.

In earlier times Westchester County was a great farming and grain-raising region. Following the settling of Manhattan Island, pioneers pushed up the Hudson to open the region that made Hendrick Hudson, when he first saw it in 1609, exclaim, "This is the richest land my eyes have feasted on." An outstanding figure among the early settlers was Frederick Philipse

who came to America some time prior to 1653. Prospering as a carpenter and builder in New Amsterdam, he invested some of his profits in the purchase of the Yonkers plantation in 1672. Subsequent purchases added to his holdings until in 1694 the chain of his possessions extended along the Hudson River from Spuyten Duyvil Creek to Croton River, a distance of twenty-two miles, and from the Hudson easterly about four miles to the Bronx River. This vast area, now comprising some of the choicest sections of Westchester County, was erected by Royal Charter of William and Mary into the Manor of Philipsborough.

A relic of the feudal system, this manor had many farming-tenants who brought their grain to the mills owned by Philipse, Lord of the Manor. His first or "Lower Mill" was established at Yonkers where the Saw Mill River dropped through waterfalls and rapids to the Hudson. At the mouth of the Pocantico River, the "Upper Mills" were established. At both places the Manor Houses are still preserved. The one at Yonkers is a public museum and that of the "Upper" or Sleepy Hollow mill at North Tarrytown is the residence of Elsie Janis.

It seems strange now to think of Westchester County as a grain-raising region; but the wheat and flour shipped from the "Upper Mill" were known in Europe for their superior qualities. Farming in this region has now virtually disappeared before the march of suburban residential development, northward from New York City. The region eastward from the Bronx River to Long Island Sound is equally interesting. It included the Manor of Pelham and the Manor of Scarsdale, and considerable historic interest is attached to the early settlement of New Rochelle and Rye.

During the Revolution, Westchester County was the Neutral Ground, and suffered more from the evils of war than any other part of the country. This region was pillaged and robbed by the notorious Cowboys ostensibly Royalists engaged in plundering cattle for the British and the equally perfidious cattle-thieves known as Skinners who professed to be attached to the American cause. The events of this period form the basis of James Fenimore Cooper's novel "The Spy".

In laying out the County Park system, first attention was given to securing water-front parks and public beaches on the Hudson River and on Long Island Sound. The Croton Point peninsula, projecting into the magnificent sweep of the Hudson River between Haverstraw Bay and the Tappan Sea, and having an area of over three hundred acres, has been acquired as a

public park. It has over four miles of shore line principally sandy beaches, providing extensive bathing and boating facilities. Ranging from level meadows to wooded slopes and plateaus, its diversified area can be utilised for a wide range of recreational activities including athletic fields, playgrounds, ball fields and camps. Sentimental interests further add to the appropriateness of preserving Croton Point as a public park. The spirit of the aborigines hovers over the remains of the fortified village of the Indian sachem Croton, from whom the point takes its name; and Indian shell-beds several feet thick are still to be seen along the Hudson shore. During the Revolution, the conspicuous position of the point naturally made it the scene of stirring incidents including the firing on the British sloop of war Vulture which brought Andre up from New York.

Kingsland Point Park also on the Hudson River, near North Tarrytown has a good sandy beach. The park-area extends back from the Hudson along its tributary, the Pocantico River, to the place where the latter is crossed by the Headless Horseman Bridge. Just west of the bridge is the Philipse Manor House and site of "Upper Mill". Nearby, on the easterly side of the Albany Post Road is the Old Dutch Church of Sleepy Hollow. This is believed to be the oldest church edifice in New York State and is one of the antique curiosities of the Hudson River valley. Washington Irving has immortalized the Old Dutch Church and its locality.

A park at Crugers Station, four miles south of Peekskill, completes the list of Hudson River Parks. With a mile of frontage on the river this park also includes fields and woodlands adapted to various recreational purposes. The property included within this park is a 242 acre tract known as Cruger's Manor, so named for the Cruger family, prominent in the colonial history of New York.

Glen Island at New Rochelle on Long Island Sound, when operated some years ago by the late John H. Starin, was known to people all over the country as a summer-resort for excursion steamers from New York. It has now been acquired by Westchester County and will probably be made accessible by a bridge to the mainland.

Adjoining Rye Beach, also on Long Island Sound, a county park of one hundred and sixty acres is being established at Manursing Island. With three-quarters of a mile of beach this park, after development, will furnish the best salt-water bathing in Westchester County.

The interior parks and parkways of the system are located along stream-valleys to im-



TARRYTOWN LIGHT

JAMES OWEN

prove and protect the water-courses in a manner somewhat similar to the Fenway in Boston. In Westchester County the first large park-project of this character was the Bronx River Parkway which follows the Bronx River from Bronx Park in New York City to Kensico Dam, a distance of fifteen miles. This parkway will be completed in 1925.

A similar parkway to follow the Saw Mill River valley is included in the new system. From Van Cortlandt Park at the northerly boundary of New York City, the Saw Mill River Parkway will follow the Tibbetts Brook valley for about three and one-half miles, then cross a divide to the Saw Mill River valley which will be followed for a distance of eighteen miles to the source of the river at Chappaqua. The Saw Mill valley parallels the Hudson and lies just east of the ridge rising from the Hudson's easterly shore.

The most picturesque portion of the Saw Mill River valley is in the vicinity of Woodlands Lake formed by an old mill-dam about one mile north of the Village of Ardsley.

In the easterly part of the county the Hutchinson River Parkway will follow the stream valley from Pelham Bay Park at New York City's northerly boundary, through Mount Vernon and Pelham. Leaving the Hutchinson valley it will follow the Mamaroneck River for about three

miles and extend to the Connecticut line, the total length being about twelve miles.

Silver Lake Park consists of an area of two-hundred and sixty-one acres surrounding Silver Lake at the head of the Mamaroneck River at White Plains. Rocky woodlands rising abruptly from the lake are suggestive of mountain-scenery.

In the beautiful northern Westchester lake-and-hill country is situated Mohansic Park of 1100 acres surrounding Mohansic Lake, about eight miles east of Peekskill. This reservation which has been open to the public since the summer of 1922, completes the list of Westchester County Parks.

Excepting the nearly completed Bronx River Parkway, the various parks and parkways that have been described are in the earlier stages of development. The reservation-lands have, however, to a considerable extent been acquired and are open to the public.

Westchester County is accessible to camera-users living in the metropolitan district of New York City. The character of pictorial material afforded by the various parks is suggested by the accompanying illustrations.

[Mr. Owen is Senior Assistant Engineer, Westchester County Park Commission. We regret that we could not use more of the attractive pictures he sent us. Those here reproduced, will serve to suggest the way. EDITOR.]



MOHANSIC LAKE
GLEN ISLAND SHORE
JAMES OWEN



EDITORIAL



Duplicating Pictorial Photographs

THE discussion of placing photo-pictorial prints—direct or enlarged—on a level with paintings and etchings, not only as to their character as works of art, but as to their money-value, may be enriched by the consideration of duplication. A skilfully made photographic negative will yield an actually unlimited number of uniformly excellent prints—contact or enlarged—whereas an engraved or etched plate is subject to deterioration in proportion to the number of impressions made from it. Yet this is no reason that a direct print on platinum or silver-chloride should be sold at a price below that of an etching or an engraving. What the price of an artistic and original photograph represents is not merely the product of the negative, but the product of the brain of the artist. This is what the buying public should be made to understand, and what is conceded by eminent painters—those who, not so long ago, spoke disparagingly of photography as a fine art. Comparatively few people are aware of the fact that a pictorial worker in photography is an artist, an artist with a soul, and with a love of nature as great as that of the painter—yes, even more so, in many instances. The painter, no doubt, may revisit a spot that will yield a fine picture and, when conditions are right, will sit down and paint the alluring scene, or else make a hasty sketch which, in his studio and at a convenient time, will serve him as a guide in painting the actual (final) picture. The photo-pictorialist, likewise, makes a record-photograph for deliberate study in order to ascertain the most favorable time of day at which to make the crucial exposure. Or, he may remain and study the locality long and critically with a view to determine the hour which will yield the result he has in his mind. To this end he may revisit the spot not once, but many times, until conditions of light and atmosphere are to his liking. If the resultant negative meets his approval, then comes the selection of the suitable printing-medium—one that shall fulfil the conditions of texture and tonality. Thus the finished print, ready for the exhibition, assumes the character of originality, distinction and, if the artist wills it, of exclusiveness as well.

Granted that the prospective buyer of the exhibited print is satisfied regarding the price and

the permanency of the exhibited print, he may wonder how many duplicates are extant, or whether this is the last or only one. Of this, he has no knowledge, no assurance. Some years ago, when he bought a certain superb photo-gravure by Goupil, an impression signed by the painter of the original picture, he was assured by the art-dealer that it was one limited to fifty impressions. Hence the price was one hundred and fifty dollars. Impressions from the same plate made at a later stage were more numerous, but less fine in quality, therefore less expensive. These several stages in quality and exclusiveness exist also in etchings.

Sometimes, the painter will duplicate a subject, and the value of one of several duplicates is less than that of the existing original. Gilbert Stuart is known to have painted no less than forty duplicates of his famous portrait of George Washington—the original of which is now in the Boston Museum of Fine Arts—with scarcely a perceptible variation in characterisation and artistic execution. These he sold at one hundred dollars each, thereby commercialising his noble art. In view of the above, it would seem desirable that the pictorial worker distribute as few duplicates as possible of any one subject. The purchaser of an exhibition-print has the right to know how exclusive it is at fifty or seventy-five dollars. Perhaps, the wise pictorialist who sells his prints will adopt a system of limitation and protection whereby the public may know how rare are the prints they are buying, and if they are likely to be found in other homes. Perhaps, a system of numbering would be advisable, together with a careful record of their distribution.

A desirable mark of distinction is the notice of copyright—regularly obtained—which should be placed, not too conspicuously, directly beneath the print or in the lower right corner. It is a modest declaration that the picture is of special value to the maker and will correspondingly impress the observer. The fee of the copyright is only fifty cents, including two contact prints. The copyright affords unlimited protection and the print, wherever a copy may exist, cannot be used in any way without the written permission of the owner of the negative. The pictorial worker who shows this mark of consideration towards a trusting public will gain in recognition and standing.



ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for two years thereafter.

Awards—Advanced Competition

Indoor-Genres

Closed December 31, 1924

Second Prize: Eleanor F. Jones.

Third Prize: Herbert J. Harper.

Honorable Mention: L. Beng Guatt; Cornelia Clark; Francesco Tallarico; James D. Creegan.

Special Note

No first prize was awarded by the jury, and neither were enough Honorable Mentions granted to make up the usual selected group. We look for better work and more of it next month.

Subjects for Competition—1925

"My Home." Closes January 31.

"Miscellaneous." Closes February 28.

"Indoor-Genres." Closes March 31.

"Table-Top Photography." Closes April 30.

"Artificial Light Photographs." Closes May 31.

"Miscellaneous." Closes June 30.

"Front-Cover Illustrations." Closes July 31.

"Real Sunrise and Sunset Pictures." August 31.

"Wild and Cultivated Trees." Closes September 30.

"Miscellaneous." Closes October 31.

"Lakes, Rivers and Brooks." Closes November 30.

"Interesting People and Places." Closes Dec. 31.

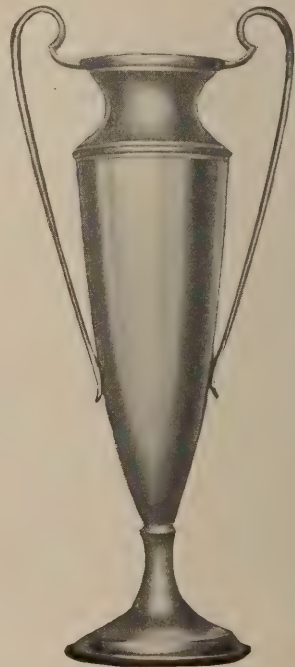


Photo-Era Prize-Cup



BOB

ELEANOR F. JONES

SECOND PRIZE—INDOOR-GENRES

Advanced Workers

ALTHOUGH "Indoor Genres" is a popular theme, and offers almost unlimited opportunities for the portrayal of intimate family-scenes, children at play, and single figures and groups including household pets, the results of the camera are not always satisfactory. The task to meet artistic requirements is, indeed, a difficult one. The obstacles are well-known, and too numerous to mention in this limited space. It is therefore not to be wondered at, that in this instance the jury failed to discover an effort worthy to receive the first prize. Hence that place is vacant.

"Bob" shown on this page, has the outstanding merit of being uniformly in a high key. That is to say, there is no dark object to disturb the prevailing harmony of the brightly illuminated subject. For this, the artist, Eleanor F. Jones, deserves special commendation. The figure of the boy is admirably (correctly) placed. Being in profile, he needs the allotted space at the left which very wisely is partly occupied by the flat dish. The intelligent observer assumes that the boy has no physical deformity and

that his lower limbs are intact though they be concealed. It were better though, if the pose indicated their presence and in this way, perhaps, had obviated the somewhat straight horizontal line, which is also emphasised by the strongly lighted table-edge. The expression of joy, and the suggestion of action and animation, are admirably depicted. A very faint and unobtrusive background, suggestive of the boy's home, might be preferable to the present monotonous, expressionless area.

Data: July; 8 x 10 Century No. 2 Studio Camera; Eastman Fast superspeed Portrait Film; pyro-elon, tank; print, Artura Carbon Black Rough Mat.

"Madonna and Child—after Raphael", page 158, could have been composed without any reference to Raphael, or any other old master. Having used, however, as a model, one that suggests the Madonna della Sedia (or Seggiola), Mr. Harper voluntarily restricted himself to a pose which does not seem to have yielded a wholly satisfactory result photographically. What the painter has balanced by masses of color our artist of the camera, Herbert J. Harper, has endeavored to



A Camera-Painting Copyrighted by Herbert J. Harper, 1924

MADONNA AND CHILD—AFTER RAPHAEL

HERBERT J. HARPER

THIRD PRIZE—INDOOR-GENRES

accomplish by means of illumination with the result that the face of the mother, that of the child, the mother's hands and those of the child have virtually one tonal value. Consequently, these highlights, and those of the mother's robe, tend to create a feeling of restlessness—a lack of gentle repose which particularly in a picture of this kind, is noticeable to experienced picture-lovers, and who are familiar with nearly all the Madonnas of Raphael and other old masters, as they have seen them in the art-museums of Europe. Mr. Harper's effort, however, is worthy of high commendation as regards the expression of maternal love and the unusually successful, almost celestial, feeling of the supposed Christ-child. The pose, even though plagiarized, is extremely praiseworthy. To imitate a well-known work of art like Raphael's "Madonna of the Chair", and do it as well as Mr. Harper has done, is an achievement.

Data: Artificial lighting—1100 watts; 1/5 second; Seneca 5 x 7 view-camera; Series II Wollensak Velostigmat; 8 1/4-inch focal length; stop F/4.5; Eastman Super Speed Portrait Film; metal-hydro; print, Vitava Etching Brown K printing paper.

"Blowing Bubbles" is a theme that has been admirably conceived. A capable painter, however, would have so arranged the material that the dish did not become the most important looking object in the picture. Besides, though the action is delightfully natural, the details (face of the child, hands, pipe, bubble and dish) are placed too closely together. The left forearm of the girl, as it rests against the edge of the table, forms an unpleasant white spot. The child's head should have been raised a little, away from the hand holding the pipe. The hair on top of the head detracts from the picture which was made with apparently little knowledge of what the final artistic result should be. The model is certainly an attractive one.

Data: April, 11 A.M.; brightlight; 3A Kodak Special (3 1/4 x 5 1/2); 6 1/2-inch B. & L. Iib Tessar; stop, F/6.3; 1 second; Eastman Par Speed Cut Film; pyro; print enlargement on Artura Carbon Black Semi-Mat.

WILFRED A. FRENCH.

A: "YES, I got a view of the pretty plaintiff. She was dissolved in tears."

B: "A dissolving-view, as it were."



BLOWING BUBBLES

FRANCISCO TALLARICO

HONORABLE MENTION—INDOOR-GENRES

“Photo-Era Magazine” and the Amateur who Weakened

MY DEAR EDITOR: It was just one year ago that my wife and I, with Scottie, the dog, were all ready for the big trip: three weeks on the Mattole River in Northern California. The car bore a striking resemblance to the “Covered Wagon” with its prodigious load of provisions, tent, fishing-tackle for two, shotgun, rifle and the little “six-shot 22” for puncturing unclaimed tin-cans. Reports were rampant that fish were plentiful—deer were plentiful—dove were plentiful—swimming was good—water was good. It seemed that fecund mother earth was waiting with divers allurements for two effete city-dwellers originally from the great outdoors and ever alert to respond to her call.

“Julia is going to be away at the same time we are, so I won’t be able to borrow her Brownie.” My wife is speaking. On previous trips she had successfully handled the picture-end of our adventure with Julia’s Kodak. An eleventh-hour rush netted me an Eastman’s Vest-Pocket $2\frac{1}{4} \times 3\frac{1}{4}$.

“An F/7.7 anastigmat,” says he, the salesman.

“Anastigmat?” I echoed.

“Yes, *Anastigmat*,” he repeated with a slight, oh a very slight, upward inclination of his eyebrows.

“Oh yes! to be sure,” I affirmed stoutly. “Now

what the deuce?” questioned the intellect, “Anastigmat! doesn’t that mean near-sightedness?”

“You just turn the rim here on the lens-mount and focus for any distance from six to one hundred feet,” he continued. Then, without thinking at all, I returned, “But I’m going into the mountains, you know, and will make pictures of distances considerably over one-hundred feet.”

“Well, if you set it at one-hundred feet, you shoot to infinity,” he retorted with a superior air.

“Infinity?” thought I. “Why that’s a church-term. What’s that to do with kodaks?” Infinity! Anastigmat! surely here was something to think about. “Is there an instruction-book with it?” “Well, wrap it up; I’ll take it.” Little did I realise then what work, joy, misery and happiness that little Pandora’s box had in store for me.

“Oh! isn’t it cute,” she exclaimed, when I showed it to her. “Yes; and it’s an *anastigmat* and shoots to *infinity*,” I said very blasé-like. “Well, that’s fine. Now we have a good kodak that will last forever and we won’t have to borrow any more.”

The first night out on the four-hundred-mile journey I started on the instruction-book. First, “Sun over the shoulder.” Yes, yes, I know that. Next a splendid short treatise on achromatics, rapid rectilinears and anastigmats; then depth of focus, relative aperture.

It fascinated me. Something of a mystery, I thought. Well; that little brochure figuratively and literally opened my eyes. We made seventy-two shots and got seventy pictures. Ten of these were over- or under-exposed. Sixty were just ordinary scrub-pictures. The remaining ten were enlarged and will serve as a splendid record of that wonderful trip and those happy days of perfect companionship. These ten were so much better than the usual vacation-snaps, that I thought there was no use to store the little instrument with the rest of the outfit, and so left it out with the idea of making some pictures of sister's baby.

I dropped in down town for some films and noticed on the counter a pile of magazines called, *Photographer's Area*, or something like that. I didn't notice carefully as I was surprised to see a publication evidently devoted to picture-making. "Is there anything in it for amateurs?" I inquired. "Why yes; it's published for amateurs and professionals." That's how last November I made the acquaintance of my staunch friend, PHOTO-ERA. I know its name now well enough. And right here, Messrs. Publisher and Editor, I thank you. The real and only reason of my letter is just to say—"I thank you." For years I have subscribed to various magazines—good ones, too—but there's one thing about PHOTO-ERA that prompts me to write and brings the desire to compliment you. It is the warmth, friendliness and intimacy of your paper. This has won my admiration, and I cannot but feel that you are interested in me, a novice, and that my problems are voluntarily yours. I have never tried to analyse just how you impart so friendly a message through your magazine. In fact, I don't care how you do it. It is sufficient that you achieve a result for which many have tried, but few have succeeded.

"You shoot your arrows into the air,
"They fall to earth, you know not where."

So here's a cry of joy 'way off from the other side of the continent letting you know where one of your arrows has struck. I hope that your circulation grows and grows, that your ideals are consummated; but I hope as fervently that you never outgrow the cheerful, friendly spirit that permeates the pages of your magazine—the spirit that teaches and, best of all, encourages strugglers, like myself, who are trying to express themselves through the medium of photography, handing down to posterity the record of our ways and time.

PHOTO-ERA MAGAZINE urged me on to greater deeds. The charm and mystery of its advertisements were a lure not to be resisted. The work at the drug-store would no longer satisfy, and soon there followed chemicals, trays and such things. Dame Chance, plus fifty dollars, brought me my present equipment, a slightly used Contessa-Nettel. Carl Zeiss F/4.5 (*Anastigmat*, of course) six-inch focal length; plate, cut-film and film-pack. With this I would conquer the world. It was winter with its short days and long nights. The Contessa lay idle. Would Sunday ever come? Long evenings I fooled with the Compur, the double extension. I showed my pride to admiring friends and explained the intricacies of the complex instrument.

"See how I can even photograph a halftone right out of a book," proudly showing them the image on the ground-glass.

"Wonderful!" they gasped.

"A beauty," some exclaimed.

"Say; you'll sure get some pictures with that outfit," they agreed.

Sunday, at last! Out I sallied. Feverishly I worked. Shot up, shot down, shot right, shot left, shot front, shot back, shot high, low, jack—perspiration streamed

from every pore of my excited frame. Wife was bewildered, the dog was bewildered, I was bewildered, but happy and proud. Home again! Chemicals, trays, red light and more perspiration. The results—horrible! My F/4.5 was fast all right, a veritable comet for speed. It ran right over me in its terrible flight, leaving a trail of negatives mutilated almost beyond recognition. Faces of wife, sister and friend were terrible in their ghastly chalkiness. The longer focal length ensnared me into pitiful blunders. Sweet, little niece by a beautiful willow-tree—I shot her wide open. The print was an albino child and the graceful willow was converted into a deluge of snowballs.

Excited and interested spectators, trembling impatiently, demanded to see the results of the Great Photographer. I had to show them. Oh, the agony of it—to shatter their illusions so rudely. And then came the shock that I had expected and was ready for; but still it unnerved me. "Why I thought it was supposed to be a much finer instrument than the little one. You said it was a bargain; but these pictures are no better than the others." "No better!" May heaven bless her for her compassion. One-tenth as good would have been liberal. I was in the dumps. "Is PHOTO-ERA in yet?" "Yes, just came in." My, just look at those wonderful reproductions and to think that mortal man can do this. And here's a humorous sketch from another tyro. I laugh with him at his blunders. There follow wise words from the pens of masters whose lore seems inexhaustible and then I turn to the section where Beardsley and French hold forth, expounding their doctrine "Don't give up," and "We were all beginners once."

Another Sunday comes. Only a little perspiration, only a few shots—but more thought. Results, almost as good as the "little one." And so on through the winter and spring. Beginning now to make my print reflect the idea in mind and results as good as the little F/7.7, while now and then even better. However I always need my monthly injection of PHOTO-ERA. There's no time for any dust to settle on the top copy of the pile before the smiling clerk has deposited my twenty-five cents in the till.

It may be hard for you to believe that I'm not habitually addicted to long letters, especially after a perusal of this lengthy epistle; but that's the fact. I've been wanting for some time to let you fellows know that your work is getting results, and that it is appreciated by me and, therefore, must also be appreciated by a myriad of fellow-beginners, and even if it takes a long time for us to write, and though some of us never do write, nevertheless you "carry on" just the same. Stick to the ideas that you so admirably promulgate, and you'll win success and a host of unseen, unheard-from admirers, and the world shall be enriched by better photographs.

Sincerely yours,

CAMERON W. PRUD'HOMME.

SAN FRANCISCO, CAL.
August 30, 1924

[This appreciative letter from Mr. Prud'homme is one of many that we have received from our readers. We publish it because it helps to make clear, through the word of another, our policy of friendly and practical interest in the beginner and in the work of all who are sincerely trying to make a success of photography. From time to time, we publish such a letter, not to "blow our own horn" or because we think that we are so much better than our neighbor but rather to show the direction in which we are traveling and the service that we are trying to render. EDITOR.]



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



AT EVENTIDE

W. J. TURNBULL

Advanced Competition—Table-Top Photography Closes April 30, 1925

THERE is much interest being shown in table-top photography; and, to comply with numerous requests, we are offering a competition devoted to this branch of photography. From time to time articles have appeared on the subject in our pages and it will be remembered that there are several avenues of approach. Some use little models, others cut out pictures and make up composite subjects and still others attempt a very elaborate toy-theater effect. Probably most of our readers will confine themselves to subject-material which may be found in the home.

The important point to remember is that the table-top is to play the rôle of stage, and on it must be placed the "actor" material so that it will be well composed,

well lighted, attractive and tell a story. Heretofore an attempt has been made to suggest ways and means; but for the present—at the suggestion of many readers—I shall point out the objective and let each one find the way to it as best he may. I welcome the suggestion, for it will save me time for other duties. However, should I feel that I was in any way neglecting to do my share to help competitors, then I shall go back to the old plan which has worked well for a number of years, according to many appreciative letters from those who know.

Let me ask all those who are interested in these competitions to write me frankly should they prefer to have a longer editorial reference to the coming competitions. If the shorter form here presented will serve adequately, it will be adopted for the next few months as an editorial experiment.

A. H. BEARDSLEY.



BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of not more than *two years'* practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous

Closed December 31, 1924

First Prize: Y. Nakao.

Second Prize: Irving Sparks.

Honorable Mention: Douglas Keen; G. M. Bell; Paul L. Miller; Ernest Gannett; Henry A. Lyner; John Kemp, Jr.; Carrie M. Severins.

Beginners and the Advanced Workers

Or late, the work in our Beginners' Competitions has increased in quality and in quantity. In fact, were it not for the contributor's own written statement, it would be difficult to believe that such splendid work could be done by one with comparatively limited photographic experience. All of which leads me to venture the opinion that some pictorialists are born and not made. Surely, a beginner with a Brownie box-camera who can surpass the "advanced" worker with his Graflex must possess an instinctive appreciation of artistic values and true beauty. Yes, I have seen this very thing happen a number of times and I have taken the trouble to verify the information and data. I admit that often a masterpiece is made by a beginner because of unusual conditions which favored his inexperience and his limited equipment. Some of my best pictures were obtained that way, and I am not ashamed to admit it. Nevertheless, if pictorial ability is present at all, there is no question that careful technique and the best possible equipment leads to greater success than any haphazard dependence upon untrained genius. My point in all this is that there are some splendid pictorial photographers in the making among the Beginners; and that, if they can do what they have done with limited experience, what will they do when they are a few years older in photography! I wish that the phrase, "he's only a beginner" might be eliminated from photographic writing and conversation.

Another point that I should like to mention is one which has to do with an unexplainable fear or dread of editorial inspection and criticism. Frankly, if any reader of these lines is afraid to send in a few prints, I shall feel that my efforts have been in vain. To the best of my ability I have tried to make it clear that our competitions are not cold-blooded affairs and that our jury is not composed of individuals who simply delight to tear pictures and their makers limb from limb. After all, what good is such criticism? Does it not chill all the warmth of interest and does it not have a tendency to retard rather than advance the growth of pictorial photography? Why should not a critic be as quick to praise as to blame? In this connection I remember a certain employer who was noted for never speaking a word of commendation, no matter how well an employee tried to do his work. The rule in that establishment was to say nothing when things went smoothly; but to "make a loud noise" when things went wrong. Hence, if the employer said nothing, all was well. How much happier all his employees would have been to receive an occasional merited word of praise or encouragement. In PHOTO-



FISHING-BOATS

Y. NAKAO

FIRST PRIZE—BEGINNERS' COMPETITION

ERA Competitions it is my desire to see to it that praise is bestowed whenever it is merited and that criticism be tempered with kindness.

My third point in this little editorial chat is to suggest that our advanced workers have a very real duty or obligation to perform for the future good of photography. I refer to their sympathetic and sincere interest in the beginner. Of late, I have mentioned this several times, and I may appear to be giving the matter more attention than is necessary. However, from my own observations I am led to feel that too much cannot be said. Why is it that the moment a beginner breaks through into the advanced class, he appears to forget that there are many others left behind who would appreciate a friendly lift along the way? To be sure, there are many kindly, generous men and women who are devoting time and money to helping beginners by means of lectures and demonstrations at camera clubs, schools and universities. Yet, I believe there is room for that individual, quiet expression of interest whereby the advanced workers can not only perform a pleasant duty but actually strengthen their own numbers by keeping up a steady flow of new life into their ranks. How swiftly the years pass and how quickly we find ourselves being left behind in the progress of the generation that is coming on to take our places. To overlook this fact or to rail against it is simply lack of foresight. I feel that those of us who may enjoy some measure of photographic success should share our experience, our successes and our ideals with those who, in a short space of time, will carry on for us. Of what avail or satisfaction are petty jealousies, envy and hatred at photographic salons or camera clubs? If another wins success fairly let us be the first to clasp his hand; and, in so doing, I believe, that neither we nor photography will suffer. In fact, I know that we shall be happier ourselves and photography will grow.

A. H. BEARDSLEY.

Beginners' Competition

"FISHING-BOATS" is undeniably a masterpiece in pictorial composition and tonal quality. In spacing the picture is delightful, too. Had the principal object moved a few feet more towards the left, it would have reached and occupied the center of the enclosure and thus spoiled the composition. But with true artistic instinct, our young artist—still in the beginners' class—appreciated his opportunity and made the exposure at the right moment, thus giving the advancing craft plenty of room in front of it. The numerous boats, in the distance, are not too conspicuous to become annoying to the critical observer's eye. The perspective is superb, and the tone-values equally so.

Data: Made at Kobe, Japan; September; morning; good light; Eastman Kodak $2\frac{1}{4} \times 3\frac{1}{4}$; $4\frac{1}{2}$ -inch Anastigmat; stop, F/11; $1/50$ second. Eastman roll-film; Eastman Special Developer; enlarged on Eastman Portrait Bromide.

"Temple Columns" is a delight, not only in choice of subject, but in composition. The lighting is a joy, and again the critic is disarmed. The foreground has been wisely subordinated and by grace of the artist's rare skill the lighting culminates in the right spot. Rarely has an architectural subject been treated by a hand more appreciative of the subtleties of illumination than Irving Sparks' portrayal of a Doric temple. Such an example of photographic skill is worthy of emulation and should make our advanced workers look to their laurels.

Data: Made at Baltimore, Md.; September, 1924; clear day; 4 P.M.; $2\frac{1}{4} \times 3\frac{1}{4}$ Ica camera; $4\frac{1}{4}$ -inch Dominar lens; stop, F/11, with diffusing disc.; $1/25$ second; Eastman roll-film; developer, Eastman formula; enlarged on P. M. C. No. 7.

WILFRED A. FRENCH.



TEMPLE COLUMNS

IRVING SPARKS

SECOND PRIZE—BEGINNERS' COMPETITION

What's in a Polish Photo-Journal?

THROUGH the courtesy and co-operation of Mr. D. O. Macko, Richmond, California, we are able to give our readers a review of a Polish photographic magazine. We are sure that it will be of interest if it does no more than show how much more American readers have to enjoy than our Polish friends. We will let Mr. Macko describe his impression of *Swiatlocien* in his own words.

"It is published in Poznan, quite a large city, by R. S. Ulatowski, and the title is *Swiatlocien* which literally means, "light-shade"; but I do not think that it is the correct expression. However, it is a photographic term of which the first syllable is "light". The publication is in the second year of its existence.

"Half of the front cover is devoted to advertisements, the inside page as well as both sides of the back cover are filled with advertisements, chiefly of German manufacturers. Agfa and Voigtlander cover half a page each. The last page, within the covers, contains sundry small advertisements and the publishers' rates. The whole contains but twenty pages of very poor paper. It is much inferior to the poorest of American newspaper. The type is very small and the articles are principally for the advanced workers; but there is

however, a question-and-answer page, where I observed some very simple questions, such as most American amateurs know just from looking at photographic-store window-displays. Most European publications are styled after the English; but this is *modus vivendi*; in fact, I think the editor knows American editorial fashion.

"Thus you can now see that there is very little in it which would help the readers of PHOTO-ERA MAGAZINE. On the other hand, it may interest some to know that photography has a far-reaching power. Its enthusiasts are even in Poland, where one would think that photography would be of little interest; particularly so, as the conditions there are not good.

"As I am writing this, it occurs to me that we—PHOTO-ERA readers—are so much better off than the readers of *Swiatlocien* who pay 17.40 marks a year for a tiny little pamphlet of twenty pages of poor paper, poor print, no illustrations, and not much information. Although 17.40 marks, Polish money, is possibly equivalent to only one American cent, yet that is a unit of monetary measure and when we say "dollar" here, in Poland it is a "mark". It would take longer to earn 17.40 marks in Poland than it would to earn it here. We get our money's worth from the American publications."



OUR CONTRIBUTING CRITICS



A BIT OF NEW HAMPSHIRE

EDGAR S. SMITH

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

A BIT OF NEW HAMPSHIRE! That is my native State, and many a happy summer have I passed among her noble hills—but I don't like this picture.

The human mind is so constituted that it does not enjoy a mixture of landscape and geometry. In the pictorial diagram in front of us we behold a truncated cone in the background; two straight lines, at approximately 60 degrees from the horizontal, bisect in the center of the diagram, forming at the base of the cone a series of angles which are pairs and which said pairs are equal and which, being added, equal four right angles or 360 degrees. Moreover, we have a reduplication, an echo, as it were, of the larger aforesaid truncated cone, to wit: a small cone nestling at the foot of the larger cone at the apex of the aforesaid bisection. The picture would make an excellent illustration for a textbook on geometry.

The human mind also likes to see some reason for things, some hint to indicate on what a thing stands and is supported. In this picture, we see a lot of trees in the foreground apparently without support; the base and ground have been cut away, leaving the beholder intellectually up in the air, so to speak.

The effect of the sharp line at the right that bisects the large cone is too brusque. In true rendering of nature, this line would have been much softened by the atmosphere. Otherwise the picture is all right

and the sky is really suggested very nicely—for which much thanks.

Suggested remedy: preserve the picture and study it. It is a beautiful example of how *not* to photograph a landscape-view. Moral: don't mix Euclid and Nature.

E. L. C. MORSE.



In my opinion, "A Bit of New Hampshire," would have been more pleasing if there were more foreground and less sky. This picture looks "all up in the air". I am more interested in what I can't see at the bottom of the picture than in what I can see at the top. The picture has a blurred appearance also, and I think that it was out of focus. A few clouds in the sky would have been an improvement, too, I think. It would have taken the severely plain look from the sky. But I like the way the tones fade from dark to light, and the tree in the foreground takes the set appearance from the mountains.

What to me seems to be needed is more careful focusing, clouds and some solid earth in the foreground to make this picture an attractive landscape.

LUCILLE MEYER.



No doubt, Mr. Smith was gazing on a very beautiful "Bit of New Hampshire", when he made the picture that is being criticised this month. However, he failed to record such beauty on his plate or film.

As it stands, the picture is entirely too monotonous—



OLD TOWER, HAVANA E. L. HARRISON
YOUR CRITICISM IS INVITED

no doubt, due to a condition of very flat lighting. With the exception of the large tree at the right, a much smaller one at the left, and a few stunted trees or tree tops in the immediate foreground, the picture contains just four shades of gray. With these exceptions, the same effect could be achieved by using four pieces of cardboard of varying tones cut to the proper shape.

I am making the above statement to drive home the fact that the hills lack roundness. The view surely holds possibilities, and I feel that under different conditions of lighting a much better result could be obtained.

As to improving the picture before us, I think that radical trimming all around would help. Trimming one-quarter inch from the right and bottom and one-half inch from the left and top would result in a smaller picture containing all of the best elements of the larger print and would eliminate flat expanses of tone that are expressionless.

SAMUEL B. PRIEST.



MR. EDGAR S. SMITH's picture depicts a beautiful Bit of New Hampshire, to my eyes—accustomed, as I am, to level Jersey fields. However, it contains no really distinct object of main interest. The tree in the foreground catches the attention sooner than the mountains, whose relative distances are shown by the graduated shadings. A body of water in the foreground, possibly with reflections, would add impor-

tance to the tree, without detracting from the value of the mountainous background. But, no doubt, the best has been done with the available material in the way of composition and pictorial effect.

JOSEPH G. HOTTINGER.



THERE is no real beauty or interest in this picture. To me it is a tiresome series of several monotones, namely: (1) The sky which has no pictorial interest. (2) The mountain in the background and the two hillsides, all of which are featureless patches of nothing in particular. (3) The foreground, proper, which is an unrelated mass so flat and devoid of interest that I can hardly pick out one tree distinctly from the rest.

What the print lacks, therefore, is detail in the tones of the landscape. The tall tree, for instance should stand out better against the background. Indeed the upper portion does so very well but the bottom is entirely lost in the sea of darkness, giving us no suggestion that the tree is supported by the soil at all. There is really no composition in the subject which is simply a number of unrelated masses.

Now let me offer a few suggestions. I believe the greatest mistake has been underexposure. Take the picture over again when the light strikes at a different angle and allowing liberal exposure to record the details of the landscape which I am sure exist. Give your camera a fair chance and it will do its part.

ARTHUR MARBLE.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



At the regular members' show January 6, of the Union Camera Club of Boston, the first prize—by reason of the largest number of ballots cast by the members present—was awarded to Joseph Coburn Smith. Mr. Smith had joined the club only a few months before, and this was his first venture at a members' show. He certainly made an auspicious beginning. The Houses of Parliament, significantly entitled "The House is in Session!", give the keynote to his striking and impressive night-picture. Its originality of conception, arrangement of masses and the bridge-lights and their elongated reflections form a picture that is daring and instantly effective. The great clock-tower is dangerously near the center of the picture-area; but this tendency is offset by the buildings and the bridge with its startling highlights, at the right.

Data: Made in London, July, 10 P.M.; Graflex camera; $5\frac{1}{2}$ -inch B. & L. Tessar Ic; stop, F/8; 4 minutes (*circa*); Graflex roll-film dev. with Eastman Kodak finisher; enl. on P. M. C. No. 8.

James Owen's illustrations, pages 150 to 154, seem to carry out the spirit of the title of his article—A Pictorial Opportunity. These five views are clearly admirable themes for successful artistic treatment. Unfortunately, the photographer does not appear to have done them full justice.

"Saw-Mill River", page 150 is bisected horizontally, and the eye is impressed equally by the sky and its nearly perfect reflection. Had the lens-front been raised or lowered, the present fault in composition would have been avoided. The sky is beautiful, indeed; but the reflection is not particularly interesting, although the shore at the right, with its happy reflections, is the most attractive part of the entire view—to my mind. The strong contrasts in the picture would seem to indicate overdevelopment, of the negative—or over-correction in using the filter. Had the camerist abbreviated the foreground and, for the exposure, chosen a moment early in the day, he would have been more successful with this pictorial possibility.

Data: August, 4.30 P.M.; bright; 5 x 7 Korona view-camera; 6-inch R. R. lens; stop, U. S. 64; 2K Filter; 2 seconds; W. & W. Panchromatic Film; pyro-soda; print, Azo Soft.

"Croton Point", page 151, like the preceding picture, gives one the feeling that the view is not quite level; but this is a minor detail. The observer is interested in the stretch of foamy waters; but he may ask why the rather pretty bit of woods is so sharply delineated. If the picture were to be improved by trimming, this part of the picture ought not to be disturbed. The tendency to bisect the view is happily counteracted by the low-lying range of hills in the distance. One feels that it may be possible to improve the lighting of the scene by suggesting an early morning-hour for the exposure; even a moment during the day when the woods, beyond, could receive a little illumination, although the lack of it, as at present, is not seriously disturbing.

Data: October, 3 P.M.; cloudy; 4 x 5 Auto Graflex; Wollensak Velostigmat F/4.5; 6-inch focal length;

stop, F/8; Wollensak sky-filter; W. & W. Panchromatic plate; pyro-soda; print, P. M. C. Bromide.

"Tarrytown Light", page 153, is another possibility for a pictorial masterpiece. But why did the camerist delight in so much violent contrast. Does the human eye behold these strong opposites in dark and light as presented here? The tone-values in the sky and foreground seem to be right; but the surface of the river, and the appearance of the pine-tree at the left, are totally without character. The theme is one of extreme beauty and justifies the praise bestowed upon this region by the author. Here, again, the camerist seems to delight in bisecting his view and thereby sinning against the laws of pictorial composition. But here is an opportunity to improve the picture by trimming—at the top, of course. One ought not to criticise the delightful foreground because of its clear definition; but there seems to be no reason that the distant objects (light-house and river-boats) should be shown with such minute detail. They appear to be in the same plane as the foreground, whereas they are a long way off. Besides, the nearer craft could well be spared; yet were it not for the present importance of the light-house, I should prefer to have it retained and the latter bodily removed from the picture. By covering up with a piece of white paper first one and then the other of these two objects, the student in pictorial composition cannot but note the difference in the suggested change.

Data: June, 11 A.M.; bright sunny day; 6-inch Velostigmat; stop, F/11; 2K color-screen; 1/15 second; W. & W. Panchromatic plate; pyro-soda.

"Mohansic Lake", page 154, is a charming and restful spot—qualities fully appreciated by the photographer. The tone-values are better here than in any picture of this series. The real beauty of this scene lies below the horizon, but much is contributed by low-lying clouds. The picture would look better—in my opinion—if a liberal portion of the sky—about one inch—were removed. In doing this, the most distant shore of the lake should be given its proper level. A nice feeling of balance will be observed in "Mohansic Lake". Even this might be improved by taking about one-quarter inch from the right, thus yielding the best-composed picture by Mr. Owen in this issue.

Data: September, 3 P.M.; bright light; 5 x 7 Korona view-camera; 6-inch R. R. lens; stop, U. S. 64; 2K filter; 2 seconds; W. & W. Panchromatic plate; pyro-soda; print, Azo Soft.

By sacrificing one inch from the bottom of "Glen Island Shore", page 154, and restoring the distant water-line to its accustomed level, Mr. Owen will have a more satisfactory picture, as regards composition, than he has at present. The beautiful sky is wonderfully helpful, here; but the darkened foreground, including the peopled rock, will not be missed should it be removed.

Data: Made near New Rochelle, N.Y.; July, 2 P.M.; bright light; 5 x 7 view-camera; 5 x 7 regular Ilex Symmetrical lens; stop, F/11; 2K filter; 1/25 second; W. & W. Panchromatic plate; pyro-soda; print, Azo Soft.

Portrait of Nicola Perscheid

THE data connected with the portrait of Nicola Perscheid, by Franz Váhl of Weimar, which appeared in our February issue, arrived too late to be included in "Our Illustrations". As they are interesting, they are published herewith: Busch "Nicola Perscheid" Portrait-Objective (lens); F/4.5; focal length, 48cm.; stop, F/4.5; camera, 18 x 24cm.; plate, Lomberg Ortho-Flur; developer, Hauff-Neol; print, Bayer Gaslicht (Gaslight).

Bad Drawing in Photography

TIMES without number, I have pointed out in this department the careless way in which models are posed in portraiture and genre. It is all due to inexperience, lack of preparation, lack of study. Most beginners assume that if a pose looks well; or if it satisfies the eye, in a general way, it will look well in the photograph. But very often it doesn't. After having arranged his model, or his group, the student should look at it critically—not long, otherwise he may lose a happy pose or expression—but briefly, as well. It's the *effect in the photograph* he should seek; and to attain a truly artistic result requires knowledge. Let him carefully examine the drawing in a picture by an eminent artist. He will find no fault with it; but what enabled the painter to obtain the satisfying result—the *effect*, is a sealed book to him, and that is precisely what he should try to discover, what he should know. Here is where the experience gained in a drawing-class would be invaluable. Drawing from the living model would teach him the principles of perspective as applied to portraiture and figure-studies (genre) in photography. Now, fore-shortening of the features should not be exaggerated. The familiar expression, "A little goes a great way", is applicable to posing the head, and arranging the limbs, of the sitter. In making a profile, the amateur turns the head of his sitter directly to the right or left, and at right angles to the line of vision and lets or tells his sitter to look in the same direction. The result is that the pupil of the eye is not visible, and it looks as if it were physically lacking. The proper way is to ask the sitter to look at an object—real or imaginary—slightly nearer the camera, just enough so that a little of the pupil may be seen by the eye of the camera, but keeping the head turned in the original direction—right or left.

The same principle may be applied when the model is facing the camera and in the attitude of reading a book, or occupied in some handwork—sewing or crocheting. Usually, the effect is as if the *model's eyes were closed*. If the amateur worker were carefully to note the appearance of the eyes, in the attitude of reading or working—before making the exposure—he might perceive that something was radically wrong, and it might occur to him to try to correct it. Of course, what he wants to get, is the effect of reading. What is he to do? Without disturbing the position of the model, in the least, he simply asks him or her to raise the eyes slightly—and the face, if necessary—so that just a little of the pupils of the eyes is visible, and the trick is done. The model will be actually looking at the top of the book, or a little above and beyond it, but *appear to be reading*. Thus photographed, the face of the sitter will assume animation and the attitude becomes convincing.

If the author of "Blowing Bubbles" had possessed this knowledge, and had applied it to his attractive and promising theme, he would have produced a highly satisfactory result.—WILFRED A. FRENCH.

Dustfree Cameras

IT is remarkable how few cameras in use are free of dust. When a visitor hands me a camera for examination, I try to remember to see if it is free of dust; and my suspicion is generally well founded, for almost always I find this obstacle to clear pictures inside the camera or covering the lens. In most cases, however, and despite the care users take to protect their cameras, there may be dust covering only the exterior surface of the lens which is enough to obscure the image and cause foggy or dim pictures. Yes: they had read and heeded PHOTO-ERA's oft-repeated warnings to give the camera a thorough spring-cleaning when taking it from the shelf where it had lain during the long winter-months. After that, they were care-free, but the camera did not long remain dust-free. To be sure, most camerists carry their cameras in leather-cases for protection; but when in actual use, the camera is carried by the short strap at the end, or handle, in the city-streets where all kinds of dust and dirt are flying about. As the lens is generally unprotected, it will collect dust.

Investigating the matter a little further, I discovered that dust may invade the carrying-case if it does not close tightly. One day, last summer, a Western caller asked me to examine his camera, one of the folding pocket type, which he had kept, ready for immediate use, hanging on a hook in the railway-car in which he had been traveling. To our mutual astonishment, we discovered that coal-dust had settled on the lens and a little of it had found its way into the camera! Deliberating on the matter, we decided that a close-fitting suède cover, to be made by a tailor—if not by my visitor's wife—would be an ideal thing to prevent dust from reaching the camera.

Several months later, my grateful visitor wrote me that his wife had procured the necessary material and made the suggested cover. This he had shown to members of his camera-club who were enthusiastic about it. It is more than probable that the thin, attractive-looking suède camera-cover, fashioned by nimble, graceful fingers, served as a welcome Christmas-gift—bestowed last year upon certain happy camerists on the Pacific Coast.

Among the commercial camera-covers of this character is one made by the Ica people. It is thin and of a light color, and resembles a lady's wrist-bag, whose opening consists of two tight-fitting metal rims which are closed by two small round metal balls when they are snapped together. It is made only in sizes to fit pocket-cameras. An advantage of such a camera-cover—commercial or home-made—is that its thinness permits it to remain on the camera after the latter has been taken from its heavy leather-case and is being carried in the pocket for early use. It takes but a few seconds to slip the cover off or on. Of course, it remains on the camera when the latter is returned to its carrying-case.



At the club. A.: "Have you a penny about you, old man? Thanks! But say—this isn't a penny. It's an English coin! What I want is a penny—an American penny." B.: "Why didn't you say so in the first place. Let's see. Here's your penny—or rather a cent. You're over a hundred years behind the times. (Taking back his penny) Thanks! I keep it as a pocket-piece. Besides, it's handy when I want to make up a formula from the B. J."



ON THE GROUNDGLASS

WILFRED A. FRENCH



Mah Jong Eyes

It beats all to what extent some persons apply their ingenuity. Now here's a certain member of the Union Camera Club, of Boston. At club-meetings, he is clever at repartee, ever ready and resourceful. His latest bit of humor is what he terms his "Mah Jong Eyes". When some one remarked that clear, normal vision was limited to fifteen degrees, *i.e.*, the eye being fixed on an object directly opposite the line of vision—at right angles, not obliquely, he laughed. "That may be so," he said, "but when I cross the street with autos in front of me, to the right of me, to the left of me, and behind me—like Tennyson's cannon at Balaklava—I seem to develop an angle of vision covering about one hundred and eighty degrees, or nearly half a circle. It gives me the feeling of being able to look around corners. It comes in handy when playing Mah Jong. Of course, I don't lean over and peek. But by leaning back—if I want to be mean enough to see what suit one of my neighbors is favoring—I can catch a glimpse that will tell me." "Mah Jong Eyes, as it were," remarked a fellow-member. "You've said it," was the reply.

The Lure of New Words

THE eagerness with which new words are taken up by ignorant persons and, of course, misapplied, is astonishing. The word "replica" means only one thing, namely, the duplication of a work of art by the hands of the *artist who made the original*. It cannot correctly be applied to a copy executed by another artist, no matter how well the work be done. PHOTO-ERA has published numerous ludicrous applications of the misused term, "replica"—to the child which looks like his father; a day like the previous one; an accident similar to another; a youth's kiss bestowed upon his beloved, just like the one given on the evening before!

The word has now invaded the motion-picture industry. Our ever vigilant friend, W. H. Blacar, has seen, somewhere, the following gem:

"Motion-Picture
Portraits
are Life's *Only* Replica."

Nuremberg's Public Clocks, Weather-and-Time Tables

IN view of the complaints that have been made of the lack of synchronism in Boston's public clocks, here is an example of municipal enterprise in the old, far-off city of Nuremberg, Bavaria. During my last visit, several years ago, to this historic city with a municipality that looks after the welfare of its citizens in an efficient and unostentatious manner, I was so agreeably impressed with the uniform accuracy of its conveniently placed municipal clocks, that I made up my mind to bring home something as a proof of civic progress scarcely to be expected from an old city of continental Europe. As the nearby St. Sebaldus Church had claimed my last 5 x 7 film, a carefully

made pencil-sketch had to take the place of a photograph. The object of my interest was a four-faced clock, prominently placed at the top of a small, octagonal-shaped building known as a *Wetterhäuschen* or weather-kiosk. There are four of these kiosks conveniently situated in different parts of the city and away from obstructing buildings or trees. They are inspected regularly, each day, by an expert official who attends carefully to each of the several departments of the "Kiosk". Each *Wetterhäuschen* is built of wood and, though old, is new in that it supplies the community with the latest weather-reports, standard time and other timely information. According to my notes made on the spot, the kiosk is about twenty-five feet high, nine feet in diameter, and has the appearance of a low, abbreviated tower. The windows of the eight sides on the street-floor contain the following features: first, weather-reports; second, departure and arrival of trains; third, pressure-changes; fourth, a barometer; fifth a polymeter; sixth, four thermometers, each having a standard temperature-scale—Fahrenheit, Celsius, Reaumur, and Centigrade (for the benefit of visiting tourists); seventh, concerts and amusements; eighth, entrance-door (for the attendant only). Above this section of the structure is a slanting, red-tiled roof which supports a four-sided lantern, each face of which has a circular clock-dial, electrically illuminated and affording reliable diurnal and nocturnal service. Nothing is allowed to interfere with these clocks giving accurate time. The attendant performs his duty regardless of weather-conditions. Above the clock-system rises an elongated, pyramidal roof surmounted by a wind-vane which is kept oiled in order that it may yield readily to the slightest breeze. A little below the wind-vane extend the principal points of the compass.

Thus the venerable, but hustling city of Nuremberg, in old picturesque Bavaria, places at the service of its citizens and the numerous tourists a modest, reliable and carefully regulated source of information, which may be consulted with pleasure and confidence by the people and tourists alike. What an opportunity for Boston! and, perhaps, other cities! Meanwhile, let us continue to take comfort in the partial service rendered by the dependable side-walk clock on Boylston Street, near Berkeley; the accurately striking clock of the Christian Science Church, Falmouth Street; the chronometers of jewelers and watch-repairers; the weather-kiosk on the Common; the thermometers attached to most sidewalk clocks and, for train-service, the telephone.



"SENDIN' Mariar ter that finishin' school was all nonsense," said old Hawbuck as his daughter went into the parlor to meet her visitor. "Here's that young man Foster been callin' here for six months an' she ain't able to finish him yet."—*Boston Transcript*.

She must have been one of those so-called "amateur-finishers".



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



A Resistant Negative-Varnish

WHEN it is desired to make a large number of prints the following recipe gives a very resistant varnish to preserve the negative:

| | |
|-------------------------|------------|
| White shellac..... | 40 grammes |
| Gum mastic..... | 8 " |
| Spirits turpentine..... | 8 cc. |
| Gum sandarac..... | 10 grammes |
| Alcohol..... | 600 cc. |

Cover the gums with the alcohol, then add the turpentine, stirring thoroughly and set the whole in a warm place for eight days. Then stir again, allow to settle and decant the clear liquid, or filter.

La Photo. pour Tous.

Inexpensive Prints with Copper Sulphate

MAKE a solution of 15 grammes of bichromate potassium and 8 grammes copper sulphate in 100 cc. water. With this impregnate the paper, which should be smooth, strong and sized, covering the sheets rapidly and drying near a fire, as success depends upon the speed of this operation. When dry the paper should be of a dark, golden-yellow color; if it is light it is evidence that the coat is not heavy enough and the operation must be repeated. The paper must be used at once and is exposed in diffused daylight, the details being black on a golden-yellow ground. Then place the print in water to eliminate the soluble bichromate, changing the water several times for about an hour. Add some common salt or alum and leave the prints in this for ten minutes; after this they are developed in an ordinary solution of pyrogallal acid. Wash in several waters and dry.—*La Photo. pour Tous.*

Printing from a Wet Negative

WHERE it is a question of time, prints may be made on developing-paper immediately after developing, fixing and washing briefly the negative, simply by moistening the paper before applying it to the negative. Expose to electric light and develop in same bath used for the negative or in a developer for the paper, if preferred.

EXCHANGE.

Retoning Sulphur-Toned Prints

NOT infrequently it happens that the photographer treats a portrait by one of the numerous sulphur-toning methods and gets a tone that is by no means satisfactory and it becomes a question of re-toning it if possible; that is, either by changing it back to a natural black or by re-toning in brown. The latter is always risky and in most cases it is best to simply change the print back to black metallic silver. For this various ways have been recommended, one of which is to place the ill-toned print in a bleaching-bath of 500 cc. water, 15 grammes copper bromide and 125 grms. ammonium bromide, working by artificial light. After bleaching, wash well and redevelop in full daylight in a solution of 1 gramme amidol in

125 cc. water, and adding 12 grms. sodium sulphite. (*Bedrijfs-Fotografie*). Instead of the above, *Das Atelier* recommends a permanganate bleacher, immersing the print in a bath of 1 gramme potassium permanganate in 500 cc. water, to which 5 cc. strong sulphuric acid and 6 grms. common salt are added. This bath, when mixed, does not keep more than 12 hours, but the neutral permanganate will keep as a stock solution and only requires a couple of drops of sulphuric acid and a little common salt to make a dependable and inexpensive bleacher, which can also be used with the amidol developer. It should be remarked that the latter will only keep for 24 hours, but may be preserved for a week by adding 2 cc. of lactic acid.

Bromoil Printing on Tissues

INSTEAD of transferring bromoil prints on paper they may also be transferred on cotton, silk or linen. Those made on silk are remarkable. In multiple transfers the stretching of the tissue requires care. Is it possible to use the process on ladies' clothing, according to the present fashion of individual ornamentation?

To Improve Negatives too much Reduced by Persulphate

NEGATIVES that have been too much reduced by persulphate may be re-strengthened by using the following bath:

| | |
|--------------------------------------|------------|
| Distilled water..... | 100 cc. |
| Rhodammonium..... | 24 grammes |
| Silver nitrate..... | 4 " |
| Sodium sulphite..... | 24 " |
| Sodium hyposulphite..... | 5 " |
| Potassium bromide (1 : 10 sol.)..... | 6 drops |

To 6 cc. of this solution add 5 cc. distilled water, and 2 cc. concentrated edinol developer. The plate is to be left in this developer for 3 or 4 hours in daylight. A tank may be used. When sufficiently strengthened, wash briefly and dry. The negative will be much less sharp than previously.—*Photo-Correspondenz.*

When Using a Color-Filter

THE interposition of a color-filter between the lens and the plate requires a slight correction of the focus, consisting in drawing the plate back a distance equal to one-third the thickness of the filter, to compensate for the deviation of the rays in passing through the extra glass.—*Corr. Fotografico.*

PANORAMIC VIEWS can be made easily with short-focus lenses, either by using a so-called wide-angle lens or an ordinary lens, but intended for a smaller-sized plate than the one to be used, taking care to reduce properly the diaphragm-opening in order to increase the surface covered and obtain a good mean definition all over the field.—*Corr. Fotografico.*



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY



The Amateur Kinematographer

WE are all familiar with the long discussions concerning the art of photography. There are at present a great number of people who will admit—or proclaim—that there is indisputably true art in photography, and that there are several true artists of the camera. At the same time these adherents of art in photography are often the most fanatical opponents of the idea that there may be art in the motion-picture.

There is not time in this discussion to make any attempt to define art, yet it is self-evident that any graphic representation must be built upon artistic principles if it is to live. This leads us face to face with the fact that without art the motion-picture could never have gained its present position in the hearts of the public.

The problem before us is to discover the part which art plays in the motion-picture. After considering this problem most of us arrive at this conclusion. Each great division of the graphic arts is built upon a foundation of technique which is peculiar to that particular art. It is obvious that the most beautiful sculpture in the world would receive scant recognition if judged solely by the technical standards of painting. Even two arts which are executed upon a plane cannot be judged by common standards as, for example, an oil-painting and an etching. Thus we arrive at the beginning of the road.

There is an art of the motion-picture; but that art is distinctive and must be judged solely by the standards of motion-picture technique. It is evident that a motion-picture cannot be arranged according to the laws of composition except as concerns the background and setting. Thus we should strive to make each setting a picture; but as far as the action is concerned, we must govern this according to the laws of the drama. This fact is the root of the present-day discussions. Dramatists resent the graphic art as displayed in the setting, and pictorialists resent the replacement of composition by drama in the principal objects of the scene, and both unite in condemning the motion-picture for aspiring to its proper place in the sun.

It seems that, at best, this position makes of motion-picture art but a hybrid; yet let us stop and consider. Every thoroughbred species we have today was developed from a primitive stock by cross-breeding or true hybridisation—and these thoroughbred species often are far superior to their primitive ancestors. As amateurs in still-photography, you have been the power which has obtained for still-photography recognition as a true art. As amateurs in motion-photography it rests with you to second most ably the efforts of the few professional pioneers in securing for the motion-picture recognition as a new, thoroughbred art.

Motion-pictures require composition and drama in their production and their proper presentation demands that music be included. The three greatest arts welded into one means that the result can be but the world's greatest art—or if a competent master does not appear—the world's greatest fiasco. Let us then combine our forces in the support of supreme art.

Subjects devoid of any particular interest from a

purely photographic point of view, became intensely interesting when the elements of atmosphere and distance were faithfully reproduced in the stereoscope. A new interest, capable of infinite variation, was given to photography. Most important of all, perhaps, the mental impression experienced when a given subject was seen, was recalled much more faithfully and completely when reproduced stereoscopically, than was possible by ordinary photographic reproduction."

Now that you will deal in film-gauges based upon millimeters, let me suggest that you adopt the metric system in all of your laboratory work. It is easily remembered, more scientific, different scales, such as wet and dry measure, and weight, are easily transposed, and per cent. solutions are more easily made up.

A Good Developer for Kino and Positive Films

CHANCE, that often plays an important rôle in kinematography, put in my way a very good diapositive developer. While developing some kino-films one Sunday I ran out of developer and had nothing in the house but some metol and glycin stock. As I do not like metol alone, I mixed the two. Ranger-Patsch, in his "Technique of Development", says that this combination works similarly to metol-hydroquinone. That is true, but the tone produced by metol-glycin is more agreeable: it gives a pure blue-black on kino films. Of course, this is no epoch-making novelty, but it has shown itself to be very good in an emergency and I here give the formula: Hot water, 1 litre, metol 4 grammes, glycin 6 grammes, sodium sulphite (dry) 90 grammes, potassium bromide, 3 grammes. For use take equal parts developer and water.—EXCHANGE.

There Is Something Afoot in Kinematography

No matter what it may be or how good it may be, there are always those who have it all settled in advance that it cannot be done. We hear from "authoritative" sources that the days of amateur kinematography are even now numbered, that it can never be made a practical success, that those who are now making equipment will cease to do so at the first opportunity, etc., etc. Were not the steamboat, the railroad-engine, the radio and airplane confronted with similar discouragement? Even radio-photography was ridiculed as practically a "pipe dream". Those of this generation who are wise, discreet, and have an eye to maintaining their reputations for being broadminded and far-seeing, will be very careful to avoid at any time saying that this or that cannot be done. The impossible is being done every day—let us not forget that!

Therefore, we urge our readers, and all those who know the truth, to stand their ground, deny the rumors which are known to be untrue and rest assured that such firms as the Eastman Kodak Company, Bell & Howell Company, Victor Animatograph Company, Harold M. Bennett, U.S. Agent for Carl Zeiss and Ica, and several others—soon to be heard from—are not planning to discontinue the manufacture of amateur motion-picture cameras and accessories "at the first opportunity". In fact, interest is increasing rapidly.



THE STEREOPHOTOGRAPHER



Through the Stereoscope

If we look at any small object by holding it at reading distance, our eyes turn inward until the two images, which they make, are united. If now the focus of the eyes is changed for distance, while the object is kept stationary, it becomes blurred; and, in place of it, two objects appear which begin to recede from each other until they are separated by as much as two or even two-and-a-half inches. If the object is a small stereoscopic view, or the reproduction of one, such as appear in our photographic journals, the retreating image of one side of the view will fall upon the other. In this case three pictures will be seen, and the middle one will be stereoscopic. To get this effect at first may be a little difficult; but after a few trials it becomes easy.

It is the function of the semi-convex lenses of the stereoscope to enable the eye to unite the two parts of the view into one. These lenses not only enlarge the image but they throw it further back; and, because they are thicker at the outside than they are at the inside, the rays of light are bent toward the center. In this way they assist the eye greatly in forming a united image; but even with this help, the tyro often finds it difficult to avoid seeing double. I made this discovery several years ago when a lady who had been using the stereoscope said to me, "I think your pictures are very beautiful; but I am sure I can see them better if I close one eye". I have since learned that a great many people fail to get the true stereoscopic effect until they have had a little preliminary training. They think of the picture as though it were only a few inches away and focus the eye accordingly; but, as a matter of fact, the focusing ought to be for a more distant plane. Scenes in which the center of interest is very near are the most troublesome, doubtless because the two halves of such a view are more unlike. I have found that in such cases the best way is to have the novice place the view out to the extreme end of the stereoscope and then gradually bring it forward while the eye is fixed upon some point in the middle distance.

Another thing I have learned is that the naturalness of a view is often dependent upon the light in which it is seen. The tone-values of a picture which is to hang on our walls are modified very much by the color of mount, frame, and the wall itself. We cannot change the environment of a stereoscopic view; but we can modify the light which falls upon it. I am afraid that it is too often the case that when we sit down with our stereoscopes, all pictures get the same treatment. It ought not to be so. A well-lighted scene calls for a strong, direct light on the paper, and a night, or other shadow-record, is much more realistic if the stereoscope is held between the eye and the source of light. Briefly stated, the lighting of the picture should correspond as nearly as possible to the original lighting.

I wish to make use of two views to illustrate this point. The first entitled "A Field of Reeds" was made near Raritan Bay from the rear of the old Billopp House of Revolutionary-day fame. A heavy sleet storm had just ended. During the night the weather had cleared and the next morning broke upon a veritable fairy-land. I was out with my camera shortly after dawn. We have been told that a brilliant lighting can not be represented truthfully on paper, as

nothing can be whiter than the stock on which the print is made. If that be true we must make only the extreme highlights in the picture to appear as white paper, and then depend upon the magnitude of the reflected light for the effect. This view should be held in direct sunlight or very close to a strong electric light. One can then see with marvelous exactness the glittering scene that enticed me from my bed on that strange winter-morning. On the other hand, if this view is examined in the ordinary way it will lose much of its brilliancy and consequently much of its interest.

The other view I wish to consider is entitled, "Rip Van Winkle's Bed". It was made in the deep forest far up in the Catskill Mountains, at the place pointed out to the traveler as the very spot where Irving's hero took his famous nap. Hold this view in strong light and it gives the impression of an open forest; but turn so that the stereoscope is between the eye and the source of light and have the picture in shadow and you can almost feel the spirit of gloom that led the weary old Van Winkle into his twenty years of slumber.

Now I cannot hope that those who read this little sketch can see the pictures as I want them to; but I take it for granted that many of them have similar views of their own which they can enjoy the better because they look at them in the proper way.

JOHN O. SCUDDER.

[Much to our regret limitations of space prevented our using the two stereographs mentioned by Mr. Scudder. However, we believe his point is made without them.—EDITOR.]

Cut Films for Stereophotography

CUT films are long out of the experimental stage and there is no reason for their non-employment in stereo-work, provided stereophotographers realise their advantages. Needless here, or at least it should be, for one to stress the unbreakable nature of films, also the ease of transportation.

A variety of emulsion is also obtainable, high-grade portrait-emulsion, well-corrected ortho-emulsion, full panchro-emulsion, and slow emulsions for transparency or copying.

It has sometimes been stated that although films gave satisfactory prints on paper, it was impossible to obtain good transparencies from them. The film was wrongly blamed, I firmly believe; for I have used nothing but film, cut or pack-film, with equally good results with both paper and glass-positives *when the film-negative was properly cared for*.

That means that the same care must be observed in handling film during the processes of loading, unloading, developing, etc.; and after drying, each film must be placed in a separate envelope obtainable especially for storing negatives. This keeps the emulsion-surface from receiving the slightest abrasion, which would show up to the detriment of the glass-transparency, although not being noticeable on a paper-print. That is the secret of dissatisfaction of the film as negative-material in stereo-work, I am sure. And by proper effort, it can be avoided.

CHARLES FRANCIS HAMILTON.



LONDON LETTER

CARINE AND WILL CADBY



THE New Year brings with it a tiresome lot of obligations that have to be met, and we usually start with light pockets, but it has one compensation in the shape of the Wellington (photographic plate-and-paper-makers) pocket-diary which usually comes now. We call it a diary, because that is the word printed in gold letters on its neat, brown, leather-cover; but it is a good deal more than that. It is a financial account-book, a photographic hand-book and a manual of good technical advice. It leads off with a clarion cry to our patriotism: "Buy British goods", it says, and then follows a crisp explanatory paragraph why we should make it our New Year's resolution. Later on we get a friendly reminder not to forget our promises—made, no doubt, in the enthusiasm of the moment, to send last year's negatives, and then come suggestions about evening-printing. When the days grow lighter, we are gently urged to enlarge our successes, and with stimulating suggestions as to screens, our minds are turned to landscape. We have no excuse to forget the holidays, for our memory is jogged to prepare for them in good time, and of course Wellington plates and papers are suggested, but in a modest, unostentatious manner, for there is nothing lacking in taste about our little *vade mecum*. And it is not only our material existence that it touches; the Saints' days are not forgotten, the Oxford and Cambridge terms, and also the quarters of the moon—it is, indeed, a guide, philosopher and friend; and if we behave as good British photographers should, it will be entirely due to the Wellington diary!

Photograms of the Year has already made its bow to the public. We wonder if its old title will ever be dropped. It is a kind of memorial to the man who coined the word "photogram", but the younger generation must sometimes wonder at the queer terminal of the familiar word photograph. How we used to laugh at, and with, Snowden Ward over his fetish for what he insisted was the correct definition. We have seldom met a man with a more cheery atmosphere or optimistic outlook. If his spirit still lives and retains his old sense of humor, it must appreciate the idea of the publication he so successfully started going on all these years insisting, as he did, on the word, "photogram".

Photograms, this year, has maintained its old standard. Mr. Mortimer has selected wisely, and his reproductions are excellent. We were glad to see that Mr. Herbert Lambert's "Ariel" (that beautiful child's head with its sense of movement) was included. This collection of the year's best photographic work is well worth buying; for unlike reproductions of paintings the black and white originals lose little—in fact, in some cases they almost seem to have gained—by the block-makers' attentions!

The Tibetan party of lamas who have been visiting this country and appearing in the prologue to the Epic of Everest film at the Scala Theatre have been trotted around London, and incidentally made some shrewd remarks on the ways of Westerners. The Grand Lama was troubled by the sight of so little work being done by hand, and foretold that the machines on which we so heavily rely would in time

destroy the man behind them. He retains his original reverence for the camera, and the passes he was noticed making with his hands while a photograph was being made of the party at the St. Stephen's doorway, was understood to refer to his belief in the habitation of the powers of darkness, his movements being a protection against whatever influence he might then be subjected to. Probably, the rapid march of events, materially helped by the constant visits to Mount Everest, will soon turn this mysterious and to us almost super-human celebrity into an enthusiastic amateur-photographer, deeply buried in the pages of PHOTO-ERA.

No doubt, the sight in our London streets of these strange orientals was a splendid advertisement for the film. We have not yet seen it; but we hear that it is a great improvement on the last, which to our minds left much to be desired—not only as an entertainment, but as light on Mount Everest.

The continuous house-exhibitions of the Royal Photographic Society are of particular interest this year. At present on the ground floor, Mr. Frederick H. Evans (one of the veterans of straight photography) has a show, mostly portraits, the result of thirty-three years' work. We well remember first meeting Evans at Holland Day's rooms in Mortimer Street, considerably over twenty years back. He brought with him a portfolio—in those photographically young and enthusiastic days, we all carried our latest pictorial achievements about with us for discussion and advice—and not knowing the man or his work, we sat down to go through the prints, anticipating the usual club-member's collection. What a surprise they were! His creed was platinum-printing even then—he has kept to it ever since—coupled with a perfect negative. No faking, or dodging problems, and leaving things to be righted on the print. He insisted with himself on the perfect negative, and got it, and some of his cathedral-interiors and portraits show platinum at its very best. It is curious to think that specimens we saw all that long time ago, or at least duplicates, are now hanging at the "Royal", and we, who are not bigoted purists in printing, can safely declare that they cannot be surpassed.

Amongst those at the "Royal" is the famous portrait of Aubrey Beardsley, one of the earliest examples of the pictorial use of hands in photographic portraiture. And Beardsley's hands were ones for the photographer to conjure with.

On the second floor are shown the *Times* stage-photographs, made during the performances with ordinary lighting. The work extends over a period of eighteen months, during which time the exposures were gradually reduced from several seconds to one-seventy-fifth of a second. Many of the scenes are pictorially satisfying, the artistic opportunity being almost entirely in design, which, however, had to be reconciled with a dramatic moment in the play. It is a wonderful demonstration of what can be done under ordinary theatrical conditions of lighting and surroundings; for here we have none of the usual "theatrical" effects, used in its worst sense, but natural, pictorial renderings of quite delightful scenes.

Photo-sculpture has penetrated to high quarters, and the Controller of the Mint has given it a prominent place in his report. But it is not true that the cost of producing a die by this entirely mechanical process is as expensive as when an ordinary artist is employed. The cost of producing a die by way of the reducing-machine from a plate made by the cameograph-process is the same as producing a die from a plaster made by an artist. As the retail-price of a cameograph ready to put into the reducing-machine is fifteen guineas, it is obvious that it is much cheaper than the similar work of even a young artist of promise. This is only one of the points where the Controller is apparently in error; but the simple fact of his discussion of the subject suggests that we are on the road towards this invention being applied in some way or other to the making of coins of the realm, or perhaps of other realms of less importance. But the very idea opens up all sorts of trains of thought. Do we really want perfect relief-portraits of our sovereigns? Would they be too realistic to fit in with our preconceived ideas? And would such a development, if pursued, bring us back to the worst sort of realistic portraiture, only in relief?



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

ASTRONOMICAL PHOTOGRAPHY FOR AMATEURS. By H. H. Waters. 94 pages, illustrated. London: Gall & Inglis, N. D.

For the amateur photographer who has mastered the technical details of terrestrial photography and seeks new worlds to conquer, there is probably no more fascinating pursuit than to turn to the heavens above. In the writer's recent articles in *PHOTO-ERA MAGAZINE* this phase of the subject was not covered; but it must not be supposed that the only work of this kind of any interest or value requires the use of elaborate observatory equipment.

In this little book, which contains an enormous amount of information that adequately compensates for its small size, is found a complete and clear account of the ways in which simple apparatus, within the reach of most amateur photographers, can be used to record celestial objects. The author has had practical experience in constructing and utilising simple photographic telescopes; and, in addition, has the ability of explaining his methods and so pointing out in a lucid and interesting way difficulties that might beset the paths of others. A number of reproductions of photographs made by him show that splendid results may often be obtained.

Although some elementary knowledge of the general facts of astronomy is presupposed of the reader, this should not deter anyone from trying this fascinating branch of photography. The essential facts may be easily obtained from any of a number of popular works, and after one begins to study the heavens in this way, his enthusiasm will increase with his knowledge.

JAMES STOKLEY.

AMERICAN ANNUAL OF PHOTOGRAPHY, 1925. Volume XXXIX. Edited by Percy Y. Howe. 296 pages of text; 163 illustrations. Price, paper-cover, \$1.75; cloth (Library Edition), \$2.50. Postage according to zone. New York; George Murphy, Inc., 57 East 9th Street, sole sales-agents.

Each year there is a definite demand for a cross-section view of photographic thought in the United States. It is a question whether any publication, no matter how large or carefully illustrated would really do justice to all the "schools" of photography which have developed and, no doubt, will develop as time goes on. Hence, we feel that the "American Annual of Photography" comes closer to reflecting cotemporary literary and pictorial photographic thought in America than do some other annuals which cover a wider field. To be sure our friends from overseas are well represented, yet, the "Annual" is American and is thus helpful and interesting to readers who wish to note the trend of things here at home. This year's text and illustrations are well worth study. Virtually the same authors and pictorialists are represented as last year. Limited space prevents a list of contributions; but it may be said that many of the leaders in American photographic thought are represented and what they have to say and the pictures they use for illustrations merit careful consideration. Although we may not agree with all that is said nor approve all the pictures, nevertheless, we may all learn much from a broad, fair-minded contemplation of recent American pictorialism. If it does, or does not, satisfy, the future will eliminate that which is created for the moment and will ensure the permanency of the true values which are to endure and to strengthen photography in the United States.

EXPRESSION IN PIGMENTING, No. 4 Tracts for Pictorial Photographers. By F. C. Tilney, F.R.P.S. 32 pages and six illustrations. Price, paper-cover, 50 cents. London: Henry Greenwood and Co., Ltd.

The fourth number in the interesting series of *Tracts for Pictorial Photographers* is an exceedingly helpful and inspirational paper. In it the pictorial photographer is taken out of doors and his path pointed out to him. Under the skilful and trained leadership of Mr. Tilney the mental excursion is a delightful experience. We need such intellectual stimulation to achieve the best in photography. No thoughtful pictorialist should be without this practical and truly helpful little book.

Funny Accidents

I SAW a cow slip through the fence,
A horse fly in the store;
I saw a board walk up the street,
A stone step by the door.

I saw a mill race up the road,
A morning break the gloom;
I saw a night fall on the lawn,
A clock run in the room.

I saw a peanut stand up high,
A sardine box in town;
I saw a bed spring at the gate,
An ink stand on the ground.

Exchange.

[It is obvious that the perpetrator of these verses intentionally omitted the hyphen from familiar compound-words in order to leave verbs with which to construct his humorous phrases.—EDITOR.]



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL-ORC.



Official Photograph, U. S. Army Air Service

Courtesy National Geographic Magazine

THE GRAND CANYON, ARIZONA, FROM THE AIR

LIEUT. A. W. STEVENS

Not Too Early to Think of Camp

Now that Congress has done its work, so far as the War Department appropriations are concerned, National Guard and Reserve Officers and Enlisted men will do well to look ahead to attending some camp or school of instruction during the coming summer. Unfortunately, all who desire to attend cannot go because of lack of government appropriation or for personal business-reasons. However, several thousand officers and men will be ordered to camp, and it is wise to prepare to go; for this year, I understand, we shall receive orders instead of questionnaires. This means that only valid excuses will be accepted for inability to attend camp.

In connection with this matter of summer instruction,

let me say that the Commanding Officer of the Department of Photography, Air Service, Technical School, Chanute Field, Rantoul, Illinois, will have an illustrated article on the work of this school which will be of special interest to all photographers in and out of the service. This feature article is scheduled for an early issue. Moreover, it is my intention to give an informal, illustrated report of my own experiences at Camp Devens, Mass., and at The Weirs, New Hampshire unit-regimental camp. I shall try to point out just what it means to go to camp from a civilian and an army point of view. I hope that when the reader has concluded the article he will agree that it pays—and pays well, in more senses than one—to go to a U. S. Army camp or school of instruction.

THE PICTURE-MARKET

There is a market for every good photograph. The amateur and the professional photographer have the opportunity to sell good pictures and to derive financial benefits from their camera-work. To make this department accurate and reliable we have requested and obtained the hearty co-operation of the editors. We make no claim to publish a complete list of the markets each month: but the names of magazines that appear below we know to be reliable and in the market for photographs at the time of going to press. We have obtained our information direct from the editors themselves.

New York Times, Mid-Week Pictorial, and Wide World Photo Service, 229 West 43d St., New York City, N.Y. Charles M. Graves, Art Editor. Wants news photographs. Size unimportant. Glossy prints desired. As little descriptive matter as possible wanted. Pays for accepted prints; New York Times, \$10; Mid-Week Pictorial, \$5 per print; Wide World Photos, \$3 per print, on acceptance.

House and Garden, 19 West 44th St., New York City, N.Y. Heyworth Campbell, Art Editor. Wants photographs of houses, interiors and gardens. Size 5 x 8, glossy. Needs about twenty-five words of descriptive matter. Write the magazine as to its requirements before submitting prints. Pays \$3 to \$5 each print, on acceptance.

American Farming, 537 South Dearborn St., Chicago. Paul Stephens, Art Editor. Wants agricultural photographs. Size, 5 x 7 inches. Cover pictures, 10 x 12 inches. Glossy prints wanted. A good story will help sell the picture. Stories must be current. Better write the editor before submitting pictures. Pays from 50 cents to \$15, on bills rendered. Editor writes: "We do not want freaks. Pictures must exemplify good agricultural or domestic economic practices. Farm machinery (tractors, threshers, etc.) can be secured from the manufacturers, and good roads pictures from cement associations, free."

The Farm Journal, 230 South Seventh St., Philadelphia. Charles P. Shoffer, Art Editor. Wants story-telling photographs. The photographs needed for The Farm Journal must be interesting, amusing, or tell a definite story. Any size. Cover pictures should be 15 x 20 inches. Glossy prints preferred. Enough description should accompany the picture to accurately describe it. Pays from \$1 to \$3 for ordinary pictures, and \$30 to \$50 for covers; on acceptance.

The World's Work, Garden City, N.Y. R. T. Townsend, Art Editor. Wants pictures of people prominent in the news. Size 8 x 10, glossy. Enough descriptive matter to serve in writing short captions. Write the Editor regarding the requirements of the magazine before submitting pictures. Pays \$1 to \$3 for pictures, on acceptance.

The Farmer, 59 East 10th St., St. Paul, Minn. Berry H. Akers, Art Editor. Wants human interest pictures pertaining exclusively to farm life and farm scenes adapted to the Northwest. Any size. Cover pictures 5 x 7, or in that proportion. Glossy prints wanted. Enough descriptive matter for a caption needed. Price paid depends on the print.

The American Hatter, 1225 Broadway, New York City, N.Y. E. Hubbard, Art Editor. Wants photographs of window displays, store interiors having an idea in the equipment or merchandising of hats. Pays \$2 if acceptable.

RECENT PHOTO-PATENTS

THE following report is made of all photographic patents, the last issues of which have been disclosed to the public, from the records of the United States Patent Office. This report is made exclusively for PHOTO-ERA MAGAZINE from the patent law-offices of Norman T. Whitaker, Washington, D.C. Copies of any of these patents may be obtained by sending twenty cents in stamps to Norman T. Whitaker, 1006 F Street, Washington, D.C.

Photographic Film with Laminated Support Having Increased Flexibility patent, number 1,521,881, has been issued to James H. Haste of Rochester, N.Y. The patent has been assigned to the Eastman Kodak Company.

Joseph Maskiof, Toronto, Canada, has received patent, number 1,521,780, on a Camera.

Patent, number 1,531,632, has been issued to Amandus N. Klitsche of Chicago, Ill., on a Printing-Frame. The patent has been assigned to The Frederick Post Company of Chicago, Ill.

Photographic-Plate-Centering Device has been received by Alexander T. Koppe of Chicago, Ill., assignor to Offset Directo-plate Company of Chicago, Ill., patent, number 1,521,633.

Eastman Kodak Company has been assigned patent, number 1,521,823, issued to James D. Muir of Rochester, N.Y. The title of the invention is Photographic Printing Machine.

Eastman has been assigned another patent, number 1,521,840, on an Acid-Fixing Bath invented by Samuel E. Sheppard of Rochester, N.Y.

Patent, number 1,523,920, on Exposure Telltale has been issued to William Vogel, New York City.

A joint patent has been issued to Arthur Miles of Woodroffe, Canada, and Wallace Miles of New York City, patent, number 1,522,899. The title of the patent is Photomechanical Printing Plate and Process of Producing Same and has been assigned to Powers Photo-Engraving Company of New York.

John G. Jones of Rochester, N.Y., has received patent, number 1,523,124, on a Photographic Carriage. Patent issued to Eastman.

A joint patent has been issued to Margaret Givler and Robert C. Givler of Cambridge, Mass., on an Automatic Camera patent, number 1,522,510.

Photographic Camera patent, number 1,522,938, has been issued to Clyde C. Ballston of New York City.

Patent, number 1,523,126, on a Folding Camera has been issued to Wilhelm Kabelitz of Friedenau near Berlin, Germany.

Laurent Bässani of Neuilly-sur-Seine, France, has received patent, number 1,524,499 on Photochromographical Process.

Film for Photographic Purposes, patent, number 1,524,508, has been issued to Solomon Cohen of Bulawayo, Rhodesia.

Eastman has been issued patent, number 1,524,289, on a Camera Front invented by John Christie of Rochester.

Carl Bornman of Binghamton, N.Y., has invented a Photographic Shutter, patent, number 1,524,081. Assigned to Ansco Photoproducts, Inc., Binghamton, N.Y.

[Those of our readers who have been watching these patent-reports from month to month will not be surprised at the announcement of several new processes and new equipment.—EDITOR.]



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



Cincinnati Camera Club's Exhibition Wins Art-Critic's Praise

THE Camera Club of Cincinnati has displayed, at Traxel's art-gallery, a captivating exhibition of photographs. It makes one look with new eyes at the world around him, and stirs in his heart a desire to forsake all else and, gypsy-like, go trudging far afield, armed with that mechanical eye which has the power to fix forever on paper visions of land and sky. As time goes by, the steady progress of the possibilities of the camera bring one to the realisation that the camera is more than a mechanical device.

In the club's display one can observe that the art of suggestion is understood by many of the members, and that the thought or idea behind the tiny lens is in reality the moving force; and the most striking photographs, and also the most artistic, are those in which the selection of the subject-matter has not been crowded out of the province of the photograph; in other words, those which do not try to vie with painting or depend upon sentiment in subject-matter to make their point, are the best. They are frankly photographs.

Such photographs as Robert Nute's "Kitchen-Door", "Autumn", "Cincinnati from Mt. Echo Park"; Robert Marshall's "Wrecks"; Bertram Jenkins's "Child Yawning"; Mr. and Mrs. Green's "The Roaring Genesee of New York", "Rural Kentucky", "Jinny Lou", "Sugar-Snow"; Hazel Hite's "Capitol at Night"; Helen Becht's "Hermit Range, Mt. Rainier"; Herman Viehman's "Mountain Cabin", "The Approaching Storm"; Charles A. Weddigen's "Willows at Inwood Park", "Shasta Daisies", "A Corner of the Kitchen-Porch", are delightful because of their truth, suggestive force and pictorial organisation.

The exhibitors are Helen T. Becht, Joseph Brems, the Misses Britt, Samuel Ettlinger, Alice F. Foster, Mr. and Mrs. Harry W. Green, William Hamberger, Charles P. Henrich, Hazel K. Hite, Bertram W. Jenkins, the Misses Lindeman, Robert L. Marshall, Dan. C. Morganthaler, Alexander Murray, Andries Nielsen, Robert P. Nute, Harry B. Olinroth, Joseph Rettig, Herman Viehman and Charles A. Weddigen.

MARY L. ALEXANDER in *The Daily Times-Star*.

Hampshire House Exhibition, 1925

WE have received the prospectus for the 1925 exhibition of the Hampshire House Photographic Society, one of the most important of the English shows. We see that it is the rule to charge no entry-fees, and we are not surprised to hear that it has been found necessary to increase the gallery accommodation in consequence. The selectors, Messrs. Charles Job, F.R.P.S., J. Dudley Johnston—the president of the Royal Photographic Society—and J. Furley Lewis, Hon. F. R. P. S., are all of the highest rank among British pictorial workers. Entry-forms and full particulars may be obtained from the exhibition-secretary, Mr. J. Ainger Hall, "Norton", Ruislip, Middlesex, England. The last date for receiving entries is April 2.

Dallas Camera Club

WE are informed that the Dallas Camera Club, 170½ Elm Street, Dallas, Texas, is still very much alive, although not much has been heard from it during the past twelve months. Plans for the year's activities were discussed at a recent meeting of the club. It is planned to obtain pictures made by members during 1925 of all events of local importance in order to have a permanent historical collection. W. W. Matthews is president and A. M. Belsher secretary of the club.

Booklet of Pennsylvania State Chamber of Commerce

THE part played by photography these days in community, state and national affairs is further demonstrated by the call of the Pennsylvania State Chamber of Commerce, Telegraph Building, Harrisburg, Penn., for pictures which illustrate the beauties of that state. It is proposed to use photography to prove to the outside world that in Pennsylvania may be found many charming spots for business and pleasure-purposes. The idea is excellent and is suggested to other states which have not already adopted it.

Attractive Booklets by W. Butcher & Sons, Ltd.

WE take pleasure to call our readers' attention to an attractive series of booklets recently issued by W. Butcher & Sons, Ltd., Camera House, Farringdon Avenue, London, E. C. 4. This series includes the following titles and apparatus: "Photography in The Home", "Lanterns and Cinemas", "Autoprint and Dualite Enlargers", "Optiscopes" and "Carbine Cameras". This descriptive matter may be obtained free of charge upon application. Here is much helpful, practical information for the asking, and we urge our readers to avail themselves of the opportunity.

An Interesting Letter from Chicago

EDITOR "PHOTO-ERA MAGAZINE":

Some months ago I seem to recall a statement in the PHOTO-ERA MAGAZINE to the effect that prints submitted in your monthly competitions were loaned to responsible organisations for exhibition-purposes.

As a member of the program committee of the Fort Dearborn Camera Club of Chicago, I should like to know if it would be possible to secure a group of prints for hanging—temporary, of course—in our club-rooms.

If it is possible to send them this far, I am sure we can satisfy you as to our responsibility. Every precaution will be taken that we may return them in the same condition as received.

You have kindly printed several notes in your valuable magazine concerning the organisation and activities of our club; to this source we owe several of our members and we thank you therefor.

It may possibly interest you to know that through

the photographically dull spell, and, in spite of the post- and pre-holiday time and money shortage, we have continued to add members. The members coming in are of the most encouraging class—some-what advanced workers who have followed the hobby for years, and we expect great things of them. However, we welcome the newest enthusiast in the city as cordially. It is encouraging to us all, however, to find so many enthusiasts.

Last fall we held open house, when we placed on exhibit our first summer's work. In preparation we did what advertising we could, and the attendance and interest displayed exceeded our fondest dreams. Each year the Chicago Camera Club hangs an exhibit in the Art Institute, and I always find that their display easily holds its own in competition with the hangings of temporary exhibit paintings in the competition for public consideration. The past two years *The Chicago Daily News* has held a summer-competition for amateur photographers and the response has exceeded their expectations, and many tell us that amateur photography is a thing of the past. In this part of the country, at least, the facts enumerated cause us to doubt it.

I presume radio is crowding the hobby in your part of the country as well as this. For my own satisfaction, I have been doing a little investigating. One of our leading retailers tells me that he does not believe it has affected his business in the least, and he supplies chiefly amateurs. Another has put in a full line of radio-goods and advertises and displays his camera stock little, if at all.

My conclusion—The amateur who takes up radio at the expense of giving up photography becomes either a listener or an experimenter. If he is artistically inclined, he becomes a listener. Listening-in may be pleasant; but it will never satisfy the creative urge, and soon he will be photographing again. The amateur who is mechanically inclined will probably never come back; but it is doubtful if this is a loss to the art, since his interest was probably in the mechanics and chemistry of the hobby rather than in pictorialism.

Back to the club. Your magazine is read by almost all of our members, and since some of our members are threatening to go into the competitions—quite a few have won prizes—I should not be surprised if you receive some specimens of our work. It seems to be one of the functions or at least results of a camera club to restrain the overconfident and to encourage the timid. One of our problems is to induce the members to show their work.

If you have read this far, I trust you will pardon me if I have been tiresome; but I thought a little informal résumé from the "West" might be of interest.

If our regular correspondent does not write you any more interesting news in the meantime, and you care to do so, you may make a note of the fact that the Fort Dearborn Camera Club is flourishing and that we are proceeding with a regular program of technical talks, print criticisms and discussions of the principles underlying pictorialism. Some of us are still plain photographers, others are working in bromoils, and gums are being discussed. Lots of enthusiasm. Visitors always welcome to our talks and demonstrations, held Friday evenings at 136 West Lake St. Thank you!

Yours sincerely,

ALGOT V. NELSON.

CHICAGO, ILL.
January 17, 1925.

[This is the sort of informal report of camera club doings that might well be adopted elsewhere.—EDITOR.]

From a Stereo-Enthusiast

EDITOR PHOTO-ERA MAGAZINE:

Congratulations, PHOTO-ERA MAGAZINE, on the establishment of the Stereoscopic department. It is what I have been waiting for for a long while, though I have not written you about it before. There surely must be enough enthusiastic stereo-workers to not only support such a department, but make it grow as well.

The article appearing in the January, 1925, issue, "Practical Facts about Stereophotography", by Mr. Hamilton, was very good, and I hope that more good ones will be forthcoming.

It seems only natural that the establishment of a stereo-department in PHOTO-ERA MAGAZINE will help to increase the interest in the subject. I feel sure that if anyone ever took up stereophotography in earnest, he would never go back to the one-lens camera. This has been my experience since becoming an "Addict" several years ago. True, I have made single pictures occasionally; but these have mostly been enlargements from the stereo-negatives, which do make rather attractive pictures when colored and framed.

When a person first becomes interested in photography, I am sometimes inclined to think he is often-times disappointed with the results obtained. What I mean by this is, he sees a pretty scene which he thinks will make an attractive picture. He snaps the picture and the result is not what he expects. I remember once a long time ago when taking a stroll through the woods with my first camera, which happened to be an ordinary box affair, I came to a pretty little clearing in the trees. It struck me as being a good subject for a picture, so I snapped it. Nothing was more disappointing to me than that picture. All the resulting print showed was a mass of light and shadow, a bewildering confusion of leaves and tree-branches, and useless detail that meant absolutely nothing. It taught me one thing, however, that one could not make all sorts of pictures successfully with a one-lens camera. A stereo-camera would have made a success of that picture, not as a pictorial masterpiece, but as an accurate record of that pretty little clearing in the woods. Two-dimensional photography falls short on such subjects as that; but I know of no subject that the stereo-camera fails on. The third dimension does the trick.

Now having had my say, so to speak, I will conclude by wishing the stereo-department success.

Truly yours,

LLOYD W. DUNNING.

CLEVELAND, OHIO.
January 18, 1925.

About Stereophotography

MY DEAR MR. FRENCH:

Stereophotography! Gee, but isn't it asking considerable of a Yankee when you ask him to twist his tongue around that word, or to wear out his typewriter in writing it? If one didn't have to use the word oftener than, let us say, once a year, it would be all right; but to use it in common, every-day talk is too much.

It is as bad as to have to say "Pyrogalic Acid", or "Hyposulphite of Soda". Life is too short for long words. Isn't there some one with brains enough to shorten things up?

As for the trouble of using a stereoscope—well, I just don't use one. Don't need to. I just put on my reading-glasses and hold the stereograph (drat that

word) at reading-distance with a good light, and focus my eyes—not on the card, but on the distance, as if I were trying to see through the card and see the scene itself, and the two pictures that I see, gradually come together and form one perfect picture.

Many years ago, I often used to see a puzzle consisting of two pictures—one of a bird and one of a bird-cage, about two inches apart. The trick was to look at them till the bird was seen to move over into the cage and perch on the roost. It's the same principle as I use.

The fact that this puzzle was popular, shows that most people could do it, and I think that most camerists would find it easy, after a little practice, and then they could easily look at stereographs even if in albums or in PHOTO-ERA.

No Stereoscope for me!

Yours truly, and I hope that you haven't frozen your ears this winter.

WILLIAM H. BLACAR.

FEBRUARY 3, 1925.

[The letter is remarkable from the fact that Mr. Blacar, an active and successful optician, is also a capable and resourceful amateur photographer. Although a man well along in years, and having undergone a certain difficult surgical operation three or four times—of late years—he enjoys good health and thinks nothing of taking a seven-mile "hike" on a pleasant day and accompanied by his faithful camera. He is a faithful reader of PHOTO-ERA MAGAZINE. Longer life and health to him!—EDITOR.]

January Activities of the Brooklyn Institute

THE work of Dr. J. B. Pardoe of Bound Brook, N.J., was hung in a one-man show at the Brooklyn Institute during January. Dr. Pardoe's work has long been known for its versatility of subject and technical excellence, so more than a mention of some of the outstanding prints is hardly necessary. Among several scenes at Princeton University was one of the Princeton Tigers sculptured by Phimister Proctor. Some very gorgeous sunsets stood out by their beauty and technique. Dr. Pardoe's work with children brought us some lively and expressive genre; his farming-scenes showed the varying phases of farm-life with the different seasons of the year, and his figure-studies in the outdoors were lovely renderings.

Dr. Pardoe's show will be followed on February 16 by the work of Nicholas Haz of New York, Miss Proslava's show having had to be postponed to a later date.

The class work is progressing well. Mr. Hans E. Jeltsch demonstrated carbonyl printing before Miss Lauffer's class and also at Mr. Zerbe's Friday night public demonstration. Mr. Jeltsch is the best and most prolific carbonyl worker in the Metropolitan district and his work is known for its excellent technique. There was a one-man show of his work at the Photographic Society of Philadelphia during the last half of January in which thirty-five out of the sixty-three prints shown were carbonyls.

A new feature in Mr. Zerbe's classes this season is a lecture on Home Portraiture with artificial lights where the students will be taught the use as well as the construction of suitable artificial lighting-equipment.

Miss Lauffer has inaugurated a new feature in her class, by holding a small one-man show of various members' work, about six prints being shown—the show changing at each class-session. The first members whose work was thus shown were Chas. W. Case and Walter E. Owen.

Clarence H. White Exhibits Photographs

AN exhibition of photographs by Clarence H. White was held at the Art Center, 65 East 56th Street, New York City, from February 9 to 21, under the auspices of the Stowaways. The exhibit consisted mostly of portraits of members of the Stowaways which are eventually to be bound into a book to be printed by Frederic W. Goudy. The fact that these photographs were printed on the same kind of hand-made paper which Mr. Goudy intends to use for the type-page is an interesting technical feat which required much experimentation. Interesting, too, from another point of view, is the variety which Mr. White obtained in this collection of men's portraits. Included in the exhibit were photographs of ship-construction made by Mr. White in the shipyards during the war. Many of these were studies in composition of unusual forms which suggest anything but ships, but are, nevertheless, the inside bones of ships. Mr. White's work in photography is internationally famous, and he is represented in the permanent collections of the Museum of Fine Arts in Boston, the San Francisco Museum of Fine Arts, and the Albright Gallery, the Museum of Fine Arts at Philadelphia, the Newark Art Museum and in a number of European museums.

ALICE M. SHARKEY.



COMING EXHIBITIONS



MARCH 1 TO 31, 1925. Twelfth Pittsburgh Salon of Photography, Pittsburgh, Pa. Entry-blanks from P. F. Squier, 237 Avenue B. Westinghouse Plan, East Pittsburgh, Pa.

MARCH 3 TO 31, 1925. Portland Society of Art, Photographic Section Annual Exhibition. L. D. M. Sweet Memorial Art Museum, Portland, Maine. Last day for receiving prints, February 21, 1925.

MARCH 7 TO 31, 1925. The Sixth Annual Salon of Photography to be held in The Albright Art Gallery, Buffalo, New York. Under Auspices of Buffalo Camera Club. For entry-forms write to Lester F. Davis, secretary, 463 Elmwood Ave., Buffalo, N.Y. Last day for receiving prints, February 9, 1925.

MAY 10, 1925. V Salon International de Fotografia de Madrid. Last day for receiving prints May 10, 1925. Further information may be obtained from Secretario del Salon International de Fotografia, Real Sociedad Fotografia, Principe 16, Madrid, Spain.

MAY 15 TO JUNE 15, 1925. Second International Salon of the Pictorial Photographers of America to be held at the Galleries of the Art Center, 65 East 56th Street, New York City. Last day for receiving prints, April 18. Address all communications to John H. Kiem, Chairman Exhibition Committee, Art Center, 65 East 56th Street, New York City.

APRIL 17 TO 26, 1925. Hammersmith Hampshire House Photographic Society, tenth annual exhibition of pictorial photography, to be held at Hammersmith House, Hog Lane, Hammersmith, London W. 6, England. Entry-blanks may be obtained from exhibition-secretary, Mr. J. Ainger Hall, "Norton" Ruispil, Middlesex, England. Last day for receiving prints, April 2.



OUR LETTER-BOX



Prices of Pictorial Photographs

I VERY heartily agree with you that the prices for high-class pictorial photographic work asked and received are entirely too low. I personally make very little effort to sell my pictures. I have sold a few at \$25.00 each, my regular price; but, frankly, I am not very enthusiastic about selling them, as good multiple-gum prints are not easy to make and to duplicate. I will gladly co-operate, should you be able to organise any well-defined movement toward the betterment of present conditions. Our National Museum is now showing pictorial photographs; but these it has acquired by gift of the artists and not by purchase. I believe that any print for which more than a very modest price is asked should be made by one of the absolutely permanent processes—platinum, oil, or gum, also that no painter has a right to use anything but the best and most permanent colors in his work. Other members of the Portland Camera Club, at our last meeting, seemed to agree that what you desire to accomplish is worth while; but some feel that it is a pretty difficult thing to sell photographs at any price.

FRANCIS O. LIBBY.

HERE are my ideas concerning your Editorial, The Price of Pictorial Photographs:

The majority of those who contribute to salons practise pictorial photography as a serious hobby, and not as a remunerative business. Thus they are not influenced in any way by necessity to compete in a market for the sale of their wares, and can put any price they choose upon their pictures, or even refuse to sell at all. I have always set a price of \$10.00 apiece for my bromide enlargements exhibited at salons, regardless of size, although most of them were made on 11 x 14 paper. This sum would not adequately pay for the time spent upon the picture, and often does not cover the cost of materials used in arriving at the final results. In putting on this nominal price, I feel that I do not want to deprive any one who is interested enough to desire the picture, from having it, by refusing to sell at all. I also think that if they are really interested enough to appreciate the work, they will not consider \$10.00 an exorbitant price. When one of my pictures has been sold at a salon, I generally feel a little regret, especially if there are other salons coming soon, to which I wished to send it.

I was very much interested in your remarks about Leonard Misonne's prints, which were straight oils, as I purchased one of those hung at the last Pittsburgh Salon. His price certainly does not do justice to his pictures, and if I were making them I should feel justified in asking \$25.00, or even \$35.00 or more for one. However, under the different conditions in his country, \$15.00 probably seems to him just as large a price.

Workers in processes of unquestioned permanency, such as transfers, where exact reproductions of personal rendering are very difficult, if not impossible, enter the class of good etchings, and I think that one is justified to ask high prices.

The great height to which pictorial photography has

attained in recent years is principally due to enthusiastic amateur workers, who spend most of their spare time in the pursuit of the pictorial, getting recreation and pleasure out of their work and feeling that, in the end, they are doing something worth while. I should be sorry to see such workers commercialise their productions. Also, I have no sympathy with the worker who puts an exorbitant price on his favorite little bromide print. He had better refuse to sell. It is the love of good work, and not the material recompense, that produces the best results.

CLARK BLICKENSERFER.

As a member of the Pictorial Photographers of America, I am complying with the request of our president, Mr. G. W. Harting, by writing a comment or reaction on your Editorial regarding the price of Pictorial Photographs. I have written my honest opinion, but feel that if it went to the buying public it would be damaging to the sale of Pictorial Photographs; but if it goes to the makers of them, it will have the opposite effect. My frank opinion is that there are many photographers, but few artists—just the same as there are many oil-painters, but only a few artists among them. Of course, when a man starts to paint, he takes it up from the standpoint of art; but the average photographer has no idea what this thing, "art", is, nor does he bother himself to find out, so naturally the percentage of real artists among photographers is small. Most photographers and the public at large seem to think photographic tricks and stunts are art, and too many of our so-called pictorial workers think that the medium (one or another) makes the picture—in other words, they put the means before the end. I believe that a picture should be able to hold its own, whether it's glossy azo or a multiple-gum. First get a picture, then improve it by giving it good "print-quality", but don't start with a shortcoming and try to make a picture by adding "print-quality".

This is only my personal opinion, and I may be wrong; but I believe that the artist in the true sense is the man that wins in Pictorial Photography.

The reaction on prices is enclosed herewith,

IRA W. MARTIN.

[See February, 1925, issue.—EDITOR.]

PERMIT me to express my approval of your January Editorial concerning the comparatively low prices at which masterpieces of camera-artists are sold. No one knows better than yourself, who has been actively engaged in photography for many years, and since 1904 as an energetic photographic editor and champion of pictorial photography. Some years ago, I decided not to sell my prints unless I received a suitable reward for my efforts. To produce an artistic landscape, by photography, takes time in getting the right light, composition and nature's mood, and skill, experience and taste in making the print. All this should be considered by the pictorialist when fixing his price. The art-loving public should be educated to under-

stand these things. They willingly pay big money for paintings, made nowadays, whose colors change rapidly, and a well-made photograph lasts a life-time. The price of such a print, 11 x 14, should be from \$25 to \$50, in my opinion.

HERBERT B. TURNER.

REGARDING prices for artistic photographs, it is a subject that does not interest me very much, as I am an amateur photographer and rarely sell a photograph. But it seems to me that if anybody can make an artistic picture in any medium, he ought to get a good price for it. It is too late to deny photography a place among the fine arts or graphic arts. There are so many ways of making an artistic photograph that it is impossible to select the best method; for some one could use a different method and attain just as good results, so most pictorialists use several methods. As for myself, I use the multiple-gum process. When asked why I don't sell some of my gum prints, I usually reply: "Life is too short." It takes me a week to make one print, not to mention the making of the positive and the enlarged negative. As it is a slow, tedious and uncertain process, I like to "hang on" to a print that suits me. It was Elbert Hubbard who said: "*Photography is a Fine Art when it is practised by an artist.*"

H. A. LATIMER.

As I know you to be sincere in your remarks about pictorial photography, I should like to say the following in reply.

To my knowledge, few pictorial photographs are sold in America, and most of these few are from foreign exhibitors. A German pictorialist told me that he liked to exhibit here because America was a good market for his prints. I was not surprised when I was informed of how little he was getting for them. We just put a *nominal* price on exhibition-blanks but I am sure that any of us would ask a great deal more if there were a demand for pictorial work.

How to create a demand for pictorial photography? More editorials like yours will do great good, but these are not enough. Co-operation in schools, clubs and societies interested in photography is necessary. If I have to judge from New York, co-operation is lacking here. If there is no co-operation among ourselves, if there is no enthusiasm about our work, how can we expect other people to be interested in it?

JOSEPH PETROCELLI.

THE prices charged for pictorial photographs can be rated the same as prices charged for paintings or drawings, if the same amount of skill and artistic ability is exercised in producing the photograph, and if it proves to be a real picture or work of art when it is finished. In many instances, pictorialists waste valuable time on gum, bromoil and other processes with the idea in mind that the process makes the picture. This is an error. A good bromide print, as made by Whitehead, Mortimer and many others, is worth much more than the majority of process-prints which are made by workers who have no knowledge of art and composition, and very little of tonal values. This does not apply to all process-workers; for we have Misonne, Judge, Kales, Ford Sterling, Clarence White, Millie Hoops and many others who are artists of the best. They should receive much more for their pictures than they charge.

The market is improving for pictorial photographs. I find that advertising-agencies, manufacturers and many other businesses are seeking good pictorial photographs and are willing to pay prices for them equal to those paid for drawings and paintings.

I have placed small prices on Salon-prints with the idea in mind that they might be purchased by fellow-pictorialists; but my professional work is charged for according to subject-matter and for what it is needed, with a minimum of \$20.00 per print ranging upward to \$60.00 and, sometimes, \$100.00 per print; and I find that I have all the business I can take care of. I made over six hundred prints last December, mostly for publishers and advertising-agencies.

ERNEST M. PRATT.



From Sunny Florida

Dear Mr. Beardsley:

Well, well! Here I am again as a visitor to Florida, but with Mrs. French. The health of both of us will be benefited by this pleasant change of three weeks. My last visit to Florida occurred over thirty years ago, when I traveled alone—as a bachelor. The celebrated, old landmarks (Fort Marion, City Gates, Slave Market, Spanish Cathedral, etc.) remain undisturbed. They have made this, the oldest city in the United States, a great attraction to visitors from all parts of the country. In consequence, St. Augustine boasts some of the most magnificent hotels in America, the Ponce de Leon and others. Hotels situated at the water-front are subject to all the loud noises of power-boats, motors, etc., so that a modest, quietly situated hotel, like the Hotel Magnolia, is more to our liking. In the late eighties, as I knew it, it was less than half of the present size, lacked an elevator, but had two handsome royal palms, no longer standing. They are included in my large collection of photographs (made from 5 x 8 plate negatives, Cramer slow (B) plates) together with still familiar views of Jacksonville, Magnolia Springs, Green Cove Springs, Palatka, the wonderful Ocklawaha River, which I expect to see again. Camerists are busy, everywhere, but true pictorialists will prefer, or rather include, the natural, and unusual scenery of Florida, together with occasional snapshots of alligators, water-birds, and the picturesque homes of native negroes. Hoping that these lines may reach the eyes of enthusiastic camerists eagerly searching for new pictorial subjects, I remain,

Cordially yours,

WILFRED A. FRENCH.

ST. AUGUSTINE, FLA.
February 8, 1925.

A Misunderstanding or You Must Say What You Mean

At the photo-counter of the Robey-French Co., Boston. Customer (indifferently handing Mr. Bourne an empty one-quarter pound Elon bottle). "What's this worth, please?" Mr. Bourne (taking the bottle and examining it critically): "I should say, fifteen cents." Customer (quickly): "I'll take ten bottles right now." Mr. Bourne (appreciating the situation): "I—I'm sorry; but we don't carry the empty bottles."

The price of a full bottle of this developer is \$1.70, and the bottle itself is handsome and expensively made.

The Belated Poet

YOUNG author, to publisher: "I suppose, sir, you are familiar with my jokes."

Publisher: "Oh, yes; I was familiar with them before you were born."—*Le Rire*.



THE PUBLISHER'S CORNER



Where Do You Want It to Go?

WE welcome the pictures to our competitions and we try to take the best possible care of them and to be of some service to the maker of each. However, to do this intelligently we do need co-operation from those who enter pictures. Of late we have received a number of entries which failed to state whether they were for the Advanced or the Beginners' Competition. For example: we have a number of prints marked "For Miscellaneous Competition". It so happens that the subject for the Advanced Competition is "Miscellaneous", likewise this is the regular subject for the Beginners' Competition. In what competition would you enter a print so marked? Were it marked Advanced or Beginners' Competition, the picture could be properly entered at once without the delay of having to write for further information.

While on the subject of competition pictures, let me add a word with regard to the legibility of the name and address. I know just how it feels to have my name misspelled in print. With all due allowances, it seems to me unnecessary. Yet, when I try to decipher some of the signatures and addresses which reach my desk each day, I begin to feel more charitable toward those who now and again have misspelled my name. In these days of many typewriters, it would seem that the gentle art of good penmanship were a thing of the past. To avoid errors in printing names of prize-winners and Honorable Mention awards, and to help the correct recording of pictures, let me ask that a special effort be made to write as legibly as possible. I assure you that it will be appreciated.

Pictures of the Eclipse in April Issue

MANY of our good friends and subscribers have favored us with interesting pictures of the eclipse of the sun which occurred January 24. Unfortunately, this material arrived several days after our March number had gone to press. Hence, let me announce that in the April number we shall try to include as many eclipse-pictures as space will permit. We might add that the photographs already received are excellent examples of the intelligent use of the ordinary hand-camera by the average amateur.

We also expect to obtain some eclipse-photographs made by professional astronomical photographers. We shall be glad to hear from any readers who had unusual experiences in photographing the eclipse.

Data for Competition Pictures

LET me call especial attention to rules No. 4 and No. 6 in our Advanced and Beginners' Competitions respectively. Both refer to the supplying of data with each print that is submitted. Of late, we have had a number of exceptionally good pictures for which there were no data and no time to obtain them before publication-date. The co-operation of our readers and subscribers is earnestly requested. It will be greatly appreciated by those who follow our competitions and try to profit by them.

That Editorial Reference to Competitions

My readers will note that I have seemingly shirked my duty with regard to the length of the usual reference to coming competitions in the Advanced class. On page 161 of this issue they will find a picture and just a few words which may or may not be of service. Frankly, I feel a bit guilty. However, I was told by several readers and subscribers that although my previous lengthy editorial references were by no means dry reading—provided a person had the time to read them—yet, they were too long for a busy man or woman to peruse in the effort to find out what the next competition was all about. The suggestion was made that I try out the matter by eliminating the long editorials for a month or two to see just how my readers felt about it. Hence, I shall do it on a tentative basis for the present.

I might add that I have more than enough work to take up any odd moments that I may gain by not writing these longer editorials. The point is to render service, and to do it to the best advantage whether it takes more time or not.

A Word about Our Big Ben Binders

OWING to an unintentional oversight, some of the first lot of Big Ben Binders for PHOTO-ERA MAGAZINE did not have the name of the magazine stamped in gold on the back, although it did appear on the front cover. The point is that often these binders are placed on a shelf or bookcase with only the back showing. Obviously, if the name of the magazine does not appear on the back, there is nothing to indicate what the contents of the binder may be. The manufacturers of the Big Ben Binder are correcting this oversight as quickly as possible and those of our readers who have placed orders for the binders will receive them within a very few days.

Moreover, if there are any readers who desire to return their binders for the correct stamping on the back, we shall be glad to carry out their wishes. Our advertisement states that the name of the magazine appears on the cover and back of every binder—we shall stand by our word and make good every claim. We regret that this should have happened, and the manufacturer joins us in this expression. However, we are ready to correct the error if our readers will give us the opportunity.

Please Be Thinking this Over

OF late, considerable interest has developed with regard to standardising the markings of lenses in the United States. In the April issue there will be an editorial reference to this subject and all our readers, dealers and manufacturers will be invited to express their views so that an effort may be made to arrive at a mutually satisfactory solution of the problem.

Let me add that PHOTO-ERA MAGAZINE is always ready to give publicity to any idea or plan which is worth while and that will really help photography. We may not always agree; but we do believe in the free expression of opinion.



THE TROPHY
F. Y. OGASAWARA
SEATTLE CAMERA CLUB
LONDON AND LOS ANGELES SALONS, 1924



PHOTO-ERA MAGAZINE

The American Journal of Photography

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APRIL, 1925

No. 4

Eyes in the Sky—Airplane Photography

HOWARD MINGOS

IN the early days of the war a French poilu performed a bit of arduous duty in no-man's-land for which his captain desired to reward him. Asked what he would like to have, the soldier replied that next to a good meal and a suit of civilian clothes he craved a flight over the lines in a battle-plane.

It took a kilo or so of red tape to arrange it, but it was done. Our hero went aloft. Now, contrary to all the rules in any man's army, he owned a small camera. This he smuggled into the plane; and as the pilot gave him the loop-the-loop, barrel-roll and a few side spins for luck, close to the ground, the soldier amused himself by making snapshots of the terrain behind the trenches.

A few days later he sent the films to his best girl. As usual, the censor was on the job where he was wanted least. He found the films, developed them, traced them back to the embryo aviator, who was arrested for possessing a camera. But hold! For once a buck private had blundered into something besides ill luck.

Back at headquarters the corps commander had seen something in the photographs which amazed him. There lay a fairly good picture of a pestiferous enemy-position, sufficiently clear to show anybody with half an eye that a dose of shrapnel would eliminate a few rat-holes and afford an easy advance. The private was summoned.

"I don't know whether to court-martial you or decorate you," said officer to private. "You've violated the rules by carrying a camera. Yet, you have brought us information we need. You shall go back to Paris and work on larger cameras for this sort of reconnaissance."

Thus by accident and a poilu's whim aerial photography was conceived, one of the most valuable and amazing developments of the war.

The other day Macready and Stevens, the

former star altitude pilot and the latter expert cameraman for the United States Army Air Service, went up from McCook Field at Dayton, Ohio, with a new aerial camera. At 20,000 feet over Dayton they commenced "smoking" oxygen to keep alive in the rare atmosphere, which was not only thin but bitter cold.

They climbed upward for an hour. At 32,220 feet the thermometer on the instrument board registered 62½ degrees below zero. Their goggles became frosted in the intense cold. They took them off. Ice formed on their eyelids. As Stevens slapped his hands together to stir up his congealing blood, he was horrified to see his oxygen-tank slip and fall overboard. He commenced losing consciousness immediately; but he had the presence of mind to lean over and make an exposure with his camera aimed at Dayton some six miles below. Macready, aware that if they were to live they must get down to normal breathing-conditions, sent the plane lunging earthward in a tight and narrow spiral. They reached the field safely.

Stevens was helped out of the machine. Refusing medical attention he insisted on being rushed to the laboratory, where he developed the plate he had exposed. He came running out an hour later with the most remarkable photograph ever made—a picture of the entire city of Dayton, nineteen square miles portrayed on a single plate, and that done at a height which made the plane invisible from the earth despite the use of the most powerful glasses.

Stevens is now on leave of absence with the Dr. Rice expedition, exploring the headwaters of the Amazon River. His job is to fly ahead of the expedition photographing sixty-mile stretches of the route. The photographs are then placed under strong magnifying-glasses and the leaders are able to learn exactly what lies ahead of them and the best means of approach. By this method they hope to discover a passable route through

the Andes Mountains in a section of the country never before penetrated by white men.

Immediately after the war the French passed a law requiring every city in the republic to be resurveyed within three years. By surface methods it could not have been done. But one aerial photo-company surveyed and mapped two hundred large towns within the specified time. The Ministry of Liberated Provinces, confronted with the task of rebuilding devastated areas where property lines had been obliterated by years of war, resorted to aerial surveys and succeeded in restoring every section to its proper place in the official archives of the government.

Everywhere explorers are taking to the air, having decided that by climbing to lofty perches they may better obtain the information required before they seek to penetrate the hidden mysteries of ages. The Mesopotamian desert once irrigated by the Tigris and Euphrates Rivers and because of its fertility famed as the original Garden of Eden, is now being surveyed from planes with a view to reclaiming its charm.

The British government is making a similar survey of the Nile Valley in Egypt as part of a vast colonisation project, seeking first to determine the annual erosion caused by the overflow of the river. The ruins of old civilisations are being photographed on single plates. Archeologists say they can learn more from air maps and project further research operations by that means than if they spent months browsing about in a desert where sandstorms very often wipe out landmarks as quickly as they are established.

All American cities have ordinances prohibiting the smoke nuisance. A flier made some photographs over the heart of a large city. With his finished work he went to the head of an industrial corporation.

"I would like to sell you this picture of your plant made two miles high," he told the executive.

"Not interested. Didn't order the picture. Don't want it."

"Take another look at it and you may change your mind," advised the camera-expert. The other took a good long look. Then he turned to his caller.

"How much do you want for this?"

What he had seen in the picture was his two factory-chimneys belching black smoke which virtually obliterated part of the city, spread dust and dirt throughout the neighborhood and helped shut out the sunlight.

"Oh, we're selling 'em for twenty-five dollars each," replied the photographer, "but sometimes the city officials are willing to pay fifty dollars to get such evidence."

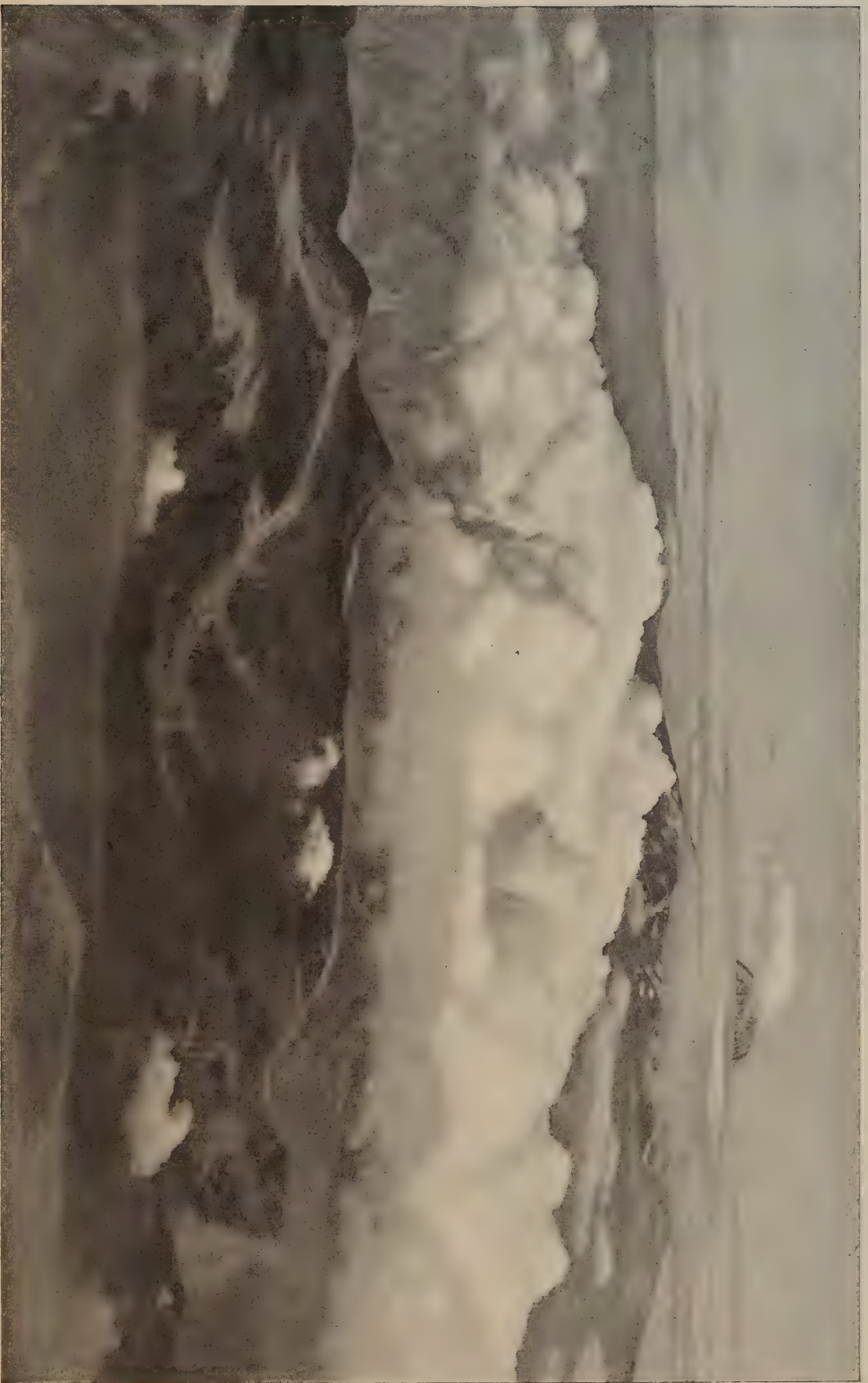
"Well, I'll give you a cheque for a hundred if you'll throw in the plate, and forget about it." And that was that.

One of the greatest menaces in any city is fire along the waterfront. Many fires are caused by floating oil from ships or manufacturing plants, and there are stringent laws against allowing oil to get out into the harbor. But it often happens. The old frigate *Granite State*, home of the New York naval militia, burned at her dock in the Hudson some time ago. The origin of the fire was a mystery until city officials scanning the aerial news-photographs made of the fire discovered an oil slick floating inshore at that point. They investigated and traced the oil directly to a broken pipe-line on the bottom of the river. In many communities the fire departments are making periodic searches for this dangerous element, using aerial photographs made at intervals at both high and low tides. Fines levied for violation of ordinances more than compensate for the expense involved.

Police are using aerial photographs in a variety of ways. Where there is a traffic problem photographs are made during the rush hours, showing the trend of traffic and its direction. By this means they can obtain an indication of channels whereby much of the traffic may be diverted, thus relieving congestion at certain points. The New York police, using the large municipal aerial map in each precinct, have studied every skylight, roof jointure and back alley, familiarising detectives and plain clothes men with each locality so that they will be better equipped to chase burglars. Likewise, the avenues of escape in and out of the city and between sections have been so charted that the entire city may be guarded within a half-hour's notice. They say it is hardly possible without the aerial map, for there are outlets which are not recorded all together on any one map.

Chambers of commerce and other trade-bodies have taken to putting out aerial photographs showing desirable locations for new industries. Railroads are using them to bring important traffic and warehouses close to their terminals and junctions. The New York Central Railroad has in its New York office an aerial map of the La Salle Street Station and surrounding districts in Chicago. By the map the engineers are projecting alterations of the entire district whereby the terminal will be linked up with other rapid-transit facilities in Chicago. There also the city officials have an air-map of the entire rail and water system in Cook County; and they are straightening the Chicago River and improving the entire transportation system.

Boston, Philadelphia, St. Louis, Kansas City



Official Photograph, U. S. Army Air Service

AIRPLANE VIEW OF MOUNT ADAMS, WASHINGTON

Courtesy National Geographic Magazine

LIEUT. A. W. STEVENS



ECLIPSE PHOTOGRAPHED WITH 35-INCH GOERZ ARTAR

FRED SCHMID

and a score or more of other large cities are using air-maps in city-planning operations. New parkways, boulevards, renovation of tenement districts and the location of business blocks and zoning laws are being determined after the city engineers have finished their study of the city as it lies before them photographically.

As this is written, large areas throughout the country are being photographed for reassessment of land valuations. It would be a difficult matter at best for a landowner to employ engineers to submit reports on his property, reports which would be subject to dispute in the assessor's office or in court. But the air photograph, by reason of its accuracy, is past dispute. Its facts do not lend themselves to argument. In the Canal Zone, a close check is kept on land slides and other natural phenomena so that the engineers will know just where to work to keep the canal free for shipping.

When the Erie Railroad piers burned in Jersey City, the insurance companies questioned the amount of damage done. Admittedly the piers had burned, but other damage was a matter of argument. The railroad company, however, had aerial views made showing the paralysed state of traffic throughout the yards and the

insurance company finally paid twice the originally estimated amount. In another case where property rights were involved the claimant was able to show to the court and the jury the effect of the sea on his land. He thereby established the extent of injury sustained because of inadequate shore protection by the Government.

The owner of a famous nursery on the Hudson was confronted with the possibility of going out of business because the cost of doing business was greater than the returns. He was compelled to keep a corps of trained salesmen who showed prospective customers over the property every time they wanted to look at shrubs or trees. One day a war pilot, turned aerial photographer, showed him a photograph of the nursery. Today the salesmen have been released for other occupations. The selling is now done at the main office, where aerial photographs show the height and quality of some 350,000 trees and shrubs. There is no more tramping over the rolling acres hundreds of yards from headquarters. The photographs have also been inserted in catalogs and a fair mail-order business has been developed.

The American Red Cross is making air photographs of the congested areas in our cities,



8.15 AM Note Clouds

1.



8.40 AM

2.



8.50 AM

3



9.10 AM

4



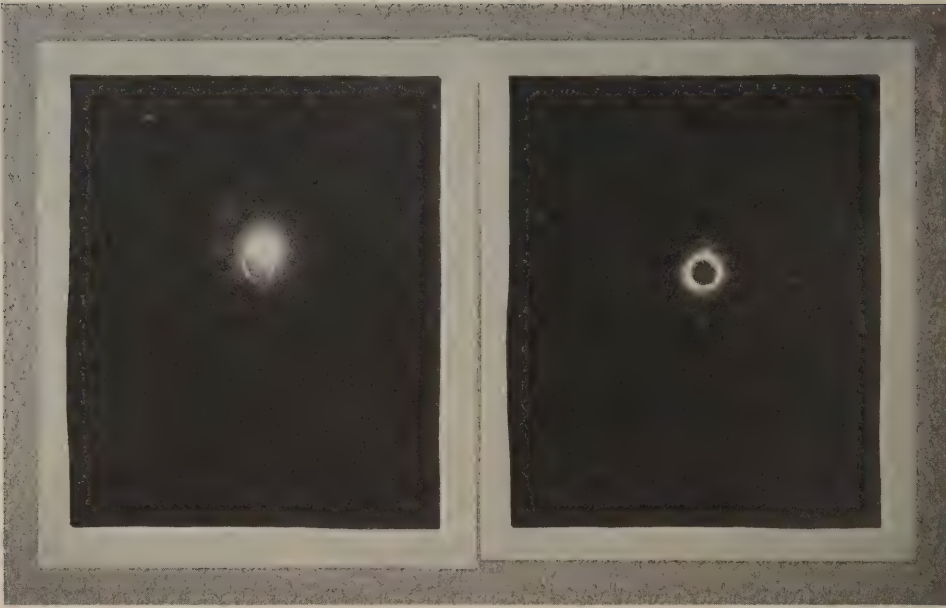
Totally

5



9.16 AM

6



CORONA AND TOTALITY

LIEUT. ROBERT A. CECCHINI

showing where slum-districts have developed through lack of parks and wide thoroughfares.

It is generally known that our coast-lines are gradually falling or rising in various sections, thereby changing the topography of the coast. While the Navy hydrographic office has been making new charts from the air, some of the rum-runners hanging off the coast have adopted similar methods to outwit pursuers. The Coast Guard and harbor-police boats are often heavier craft than those used by the runners, who make it a point to have boats of shallow draught. Often the enforcement agents give chase, to have the loaded rum boats swerve close inshore and disappear in an inlet, leaving the pursuing craft stranded high and dry on a reef or shoals.

The law-enforcement agencies are using old charts, but many of the rum-runners have equipped themselves with aerial photographs, in which they may determine the exact depth of water at certain points, at high or low tide. On the other hand, there is no strange craft lurking offshore which is not photographed from planes. The prohibition agents like to have the evidence. On one occasion they captured a small power-boat, empty, and with its lone passenger loudly protesting his annoyance at such an outrage. Of course, he insisted that he was not a bootlegger.

When his captors showed him a photograph made from a plane, he was too astonished for

words. There he was, the central figure on the deck of a rum-runner. That was sufficient evidence to warrant searching him. In a pocket of his coat they found papers proving he was part owner of a liquor-smuggling enterprise. Co-operating with the Pennsylvania National Guard the Philadelphia police are now employing airplanes to trail bootleggers and locate illicit stills and warehouses. Photographs thus obtained are proving the best sort of court evidence against persons accused of engaging in the illegal traffic.

Newer towns in the West are discarding the old method of keeping town-hall records of municipal development. They have profited by the lessons in older communities back East where musty records and frayed diaries must be depended upon to check up and prove land-titles. There are thousands of valuable pieces of property which cannot be sold or developed because title cannot be proved. Today much of the title proving in original transfers is being done by means of aerial photographs with notes photographed across the face of the picture and dated. The sky-map is an everlasting record.

Recall the old-time timber-cruiser with his sled and his dogs, mushing over the North country week after week, laying out areas to be cut by the lumber-gangs which must await his return to camp before the season's cutting can be started. Often the cruiser required months



Photographic Drawing, Copyright, 1925

T. W. Kilmer, Jr.

THE MOMENT OF TOTALITY

T. W. KILMER, JR.

for his preliminary survey. Those days have passed and more modern methods are used.

Companies now have airplanes with expert pilots and photographers. They go into the woods with their cameras, flying back and forth hundreds of miles criss-cross and up and down the entire district. They make hundreds of photographs, which are then taken back to camp. There the timber men gather about the developed pictures. They analyse burned-over, blown-down and slashed areas, important spots where reforestation is badly needed and places where the season's cutting can be done best, more easily and at greater profit. The photograph registers all the obstacles and the handicaps. Old log jams hidden away in streams miles from the trails, these must be blown up

with explosives before the next cut is floated downstream. All this work is now done in a week or two, where formerly months were required and greater cost was involved.

Saunders, one of the new generation of timber-cruising pilots, had an interesting experience in Canada last winter, where, with his plane mounted on skis, he made an aerial survey in a temperature averaging forty degrees below for weeks. The wind hampered him as much as the cold. He plugged his plane until it was wind-proof and then he rigged up his camera so that it fitted snugly into the aperture in the floor of the machine. When his radiator froze up on him he substituted kerosene oil for water. When his cold engine failed to start he used a blow torch on the crank case. By landing on snow-

covered lakes at intervals he was able to pack his films in a special weather-proof container and complete his survey on schedule as arranged.

Usually a party of eight or ten men is required to survey a tract of land, a month for every fifty square miles. In forest-surveying the work is arduous and dangerous. Swarms of poisonous insects attack the surveyors and often make it impossible for them to make correct notes. The history of engineering in out of the way places is replete with instances of hardships endured by the men who blaze new trails and break paths for civilisation. For years they dreamed of overcoming the obstacles. Then came the aerial camera, taking its operators miles in the air away from danger and hardships. Work which required a month can now be done in a single day.

The location of power transmission lines is one of the most difficult projects which engineers have to handle. On account of the high voltage carried in the wires it is imperative that they be kept away from all buildings and timber tracts. For an unknown reason the law prohibits the extension of such lines over cemeteries. And when an engineer sets out to survey a long mileage he is amazed at the number of cemeteries which bob up in his path. Then, again, the old methods of surface surveying permitted of no secrecy.

Property owners knew long in advance of the approaching surveyors, who were met with everything from shotguns to bulldogs. Where the owners desired to sell their rights, the charges were sky-high and out of proportion to the value of the proposition. The aerial survey is secret. The United States Air Mail Service projected its transcontinental route and established emergency fields every twenty-five miles or so on the night route between Chicago and Cheyenne, Wyo., before the farmers and other owners knew they were to be approached. Government agents slipped in and made contracts.

The aerial surveyors have many methods of placating property owners. First, the agent

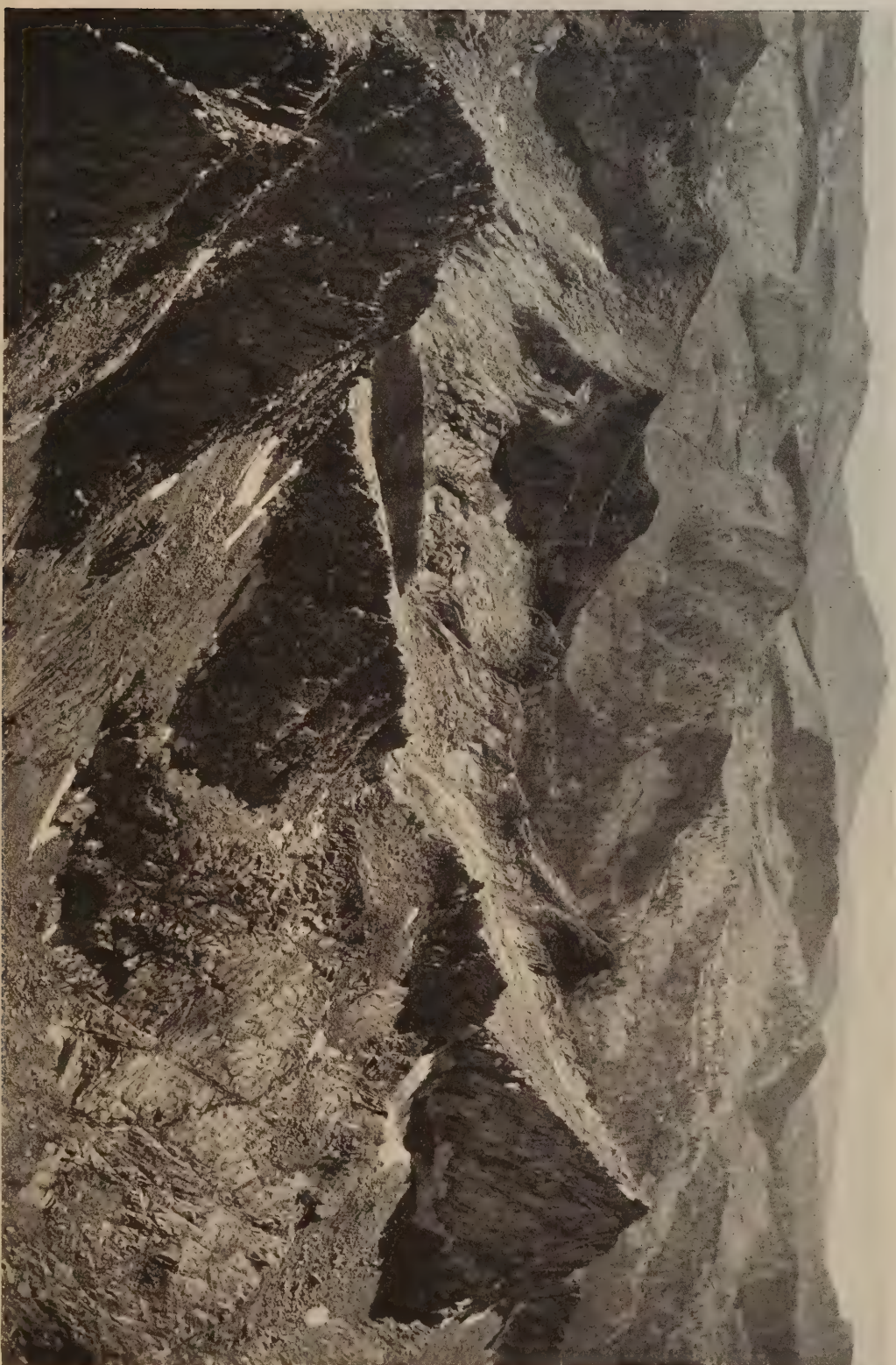
usually shows the owner a nice aerial view of his land. After he has admired it sufficiently it is given to him as a present. Two or three weeks later the contracting agent comes through and presents the owner with a set of views of the surrounding country. That does the trick. The owner signs on the dotted line.

Today there is nothing on the surface of the earth that can be concealed from the eye in the sky. The newer aerial cameras, being post-war developments, have the advantages found necessary and lacking during the last war. They weigh from thirty to forty-five pounds and their precision machinery includes more than a thousand separate parts. The average machine carries a roll of film seventy-five feet long and as wide as the large camera plate. On that may be registered as many as one hundred and fifteen separate exposures. By means of a timing-device operated electrically the exposures may be made as rapidly as one every seven and a half seconds or extended to register at the will of the man who is making the pictures. The shutters of these high-speed cameras open and close automatically in a hundredth of a second.

Their value in war cannot be over-estimated. The civilian air-routes now being operated throughout the world are the military highways of the future. They will carry the spies and the observers who, soaring higher than any natural or artificial vision can penetrate, will be able to map out any objective. Registering its impressions from several miles in the air, the camera, unseen, the plane unseen and unheard, will be safe from hindrances of any kind, yet they will make everything below an open book to those who control the plane. Small photographs may be enlarged to show fortifications, even the machine-gun nests. The microscope and aerial camera have already proved capable of laying bare the secrets of camouflage. Here we have another development of the war devoted to peaceful purposes; and, conversely, it is being perfected in advance of another emergency.

The American Legion Weekly.





Official Photograph, U. S. Army Air Service
AIRPLANE VIEW OF PEAKS OF MOUNT WHITNEY

Courtesy National Geographic Magazine
LIEUT. A. W. STEVENS



TILTING-TOP PLATFORM

DUANE P. HOTCHKISS

The Stereograph—a Joy Forever

DUANE P. HOTCHKISS



YOU have often heard it said that, "A thing of beauty is a joy forever". But as a camera-enthusiast, I would like to know how many times you have had the experience of finding a place where the view was such as to offer inspiration to our friend the poet. Then, having trained your favorite camera upon the subject and made the exposure with care, you danced with joy as you lifted what seemed to be a perfect negative out of the fixing-bath, only to have your enthusiasm drop to zero at sight of the first print from it.

As a photograph, it is good and the technique is all one could wish for. Yet, somewhere in the making, all the charm and all the beauty which seemed to be in that particular scene has

vanished. It is just a plain photographic record, with nothing about it to excite either interest or admiration. I have had that happen to me many, many times; and, no doubt, all who have taken to photography as a hobby would say the same thing.

Last spring I was talking over this subject with a small group of my friends. We had made an excursion to one of the places locally famous as one of the beauty-spots of our county. We had all made a number of exposures and thought that we were going to get some wonderful pictures. But later on, when we came to compare results, we decided—so far as pictures were concerned—that our trip had been a failure. Not one of the party had a single picture of any merit, either technically or artistically.

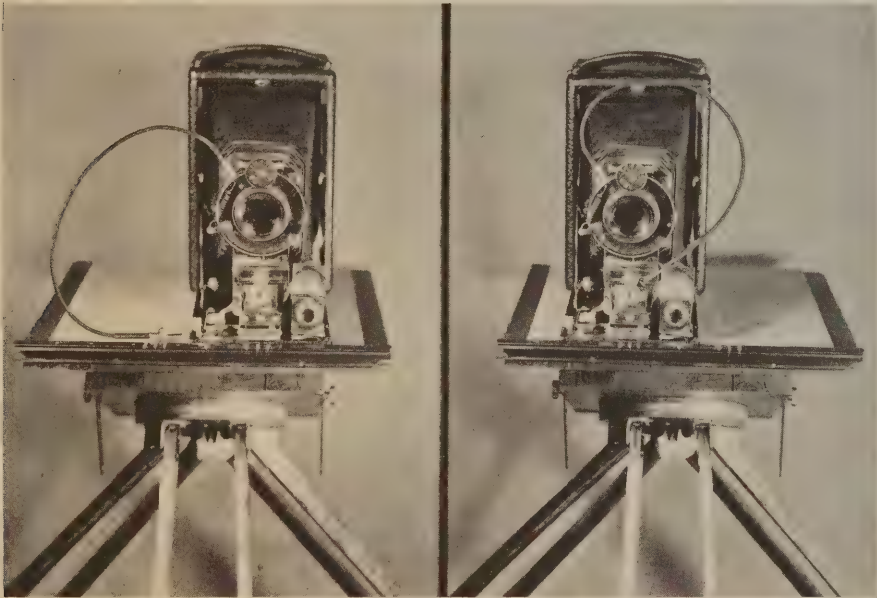
As I was the one who had been making pictures the longest, and had had the most experience, they turned on me with the question, Why?

After some thought, I told them that in this case I believed that to have been successful we should have made stereographs. What do you mean by stereographs, they next wanted to know. Therefore, I began to explain; but did not have to go very far into the details. They had all seen "stereotypes", at some time or other, and a short description of making them sufficed.

The general opinion seemed to be that I was

camera. Therefore, I set about to see what I could devise to take the place of one—and here is what I did.

Having a tilting tripod-top, I made a platform $9\frac{1}{2} \times 10\frac{1}{2}$ inches to fit on top of it. Then, across the front of this platform, I tacked a strip of flat $\frac{1}{2}$ -inch picture-frame moulding, and my stereo-equipment was almost complete. The strip of moulding on the front of the platform served a double purpose. When I set my camera on the platform and pressed it forward against the strip, it was at once squared with the point of view and could be kept square as



METHOD OF USING CAMERA AND PLATFORM

DUANE P. HOTCHKISS

trying to get them interested in something which was old fashioned and out of date—and anyway, no one that we knew had a stereo-camera. How, then, could we make a camera; moreover there was not one among us who could afford to go buy a stereo-camera. So we dropped the subject then and there.

But our little talk set me to thinking. 'Tis a long time since I made my first picture in 1897. I was familiar with "stereotypes" as a child. Yet, after I became interested in photography, I never thought about making them myself 'till just then. But after the talk we had, I wanted to make some in order that I might show my friends that there really was something in the opinion I had expressed. At the time my finances would not allow me to buy a stereo-

I slid the camera over for the second exposure. Then, too, the marks cut with my pocket-knife were a gauge to set the camera for the first and second exposures.

I cut a groove in the center of the strip first, and then on each side of the center at a distance of $1\frac{1}{4}$ and $1\frac{1}{2}$ inches. I cut three more, and then I was already to step out and make some trial exposures; and it is quite gratifying to be able to say the first ones were fairly successful.

Now, this bit of apparatus is very easily constructed and works like a charm so that any amateur who has a hand-camera, of almost any kind or size, and who happens to be interested in stereo-photography, can rig one up and try it out without going to very much expense. The platform does not need to be quite so large



(Full Size for Viewing in Stereoscope)

STILL-LIFE STEREOGRAPH

DUANE P. HOTCHKISS

for small cameras. I made mine that size so that I could use a 5 x 7 camera in case I should happen to wish to do so. But I found a Film-Plate Premo, which uses a film-pack 3 x 5 $\frac{1}{4}$ inches in size, the most convenient camera to use of those I had in my equipment.

Of course, one thing should be plain even to a novice—in this method of making stereographs—the subject chosen must be one which does not include anything which is moving or is likely to be moved after the first exposure has been made, and before the second one can be made.

Ordinarily, for average subjects, the lateral movement of the camera between exposures should be about 2 $\frac{3}{4}$ inches, if the nearest object in the field of view is quite distant. This lateral movement can be increased. For still-life subjects anyone having a good camera and lens should be able to make just as good stereographs in this way as he could with a stereo-camera. But, of course, for life and action, a twin-lens camera is necessary.

I am enclosing two 5 x 7 photographs to illustrate the device I have attempted to describe,

and a set of eight stereographs which I have made in that way.

And so, my dear Mr. Editor, if you find in all this an idea and a suggestion which may prove to be of value to others who follow photography as a hobby—yet who never happened to think of trying to make stereographs, or else thought they couldn't, because they couldn't afford a twin-lens outfit—why I shall be very glad to feel that I have helped some, at least, toward that which is so elusive—"a thing of beauty and a joy forever".

[Those of our readers who wonder whether or not they would like stereophotography will do well to follow the suggestions given in this helpful article. Mr. Hotchkiss points out that a twin-lens camera is necessary for the best work in stereophotography. He does not maintain that his method is stereophotography at its best. However, he does prove by his article and by the excellent stereographs which he sent that the simple method here described will serve to open wide the door to that fascinating branch of photography which is, indeed, "a thing of beauty and a joy forever".—EDITOR.]

A Tourist Camera-Cabinet

DALE R. VAN HORN



THE camera man is particularly fortunate because he can take his accustomed yearly vacation, and make it pay expenses. He need not plan for weeks in advance; he can take advantage of a break in the weather and strike forth next morning. He need only be a resourceful person, able to discover business while driving along the road. If he contributes to some of the magazines, he should know in advance half a dozen likely markets, what those markets need, and have all demands cataloged in his brain.

Then at any time, at any place he can stop the car, set up the camera and after the picture, be merrily on his way again. If he has unusual success with family portraiture, he should carefully chart his route through the best farming-sections. The white or red buildings of a snug farmstead in a setting of handsome trees denotes a likely prospect.

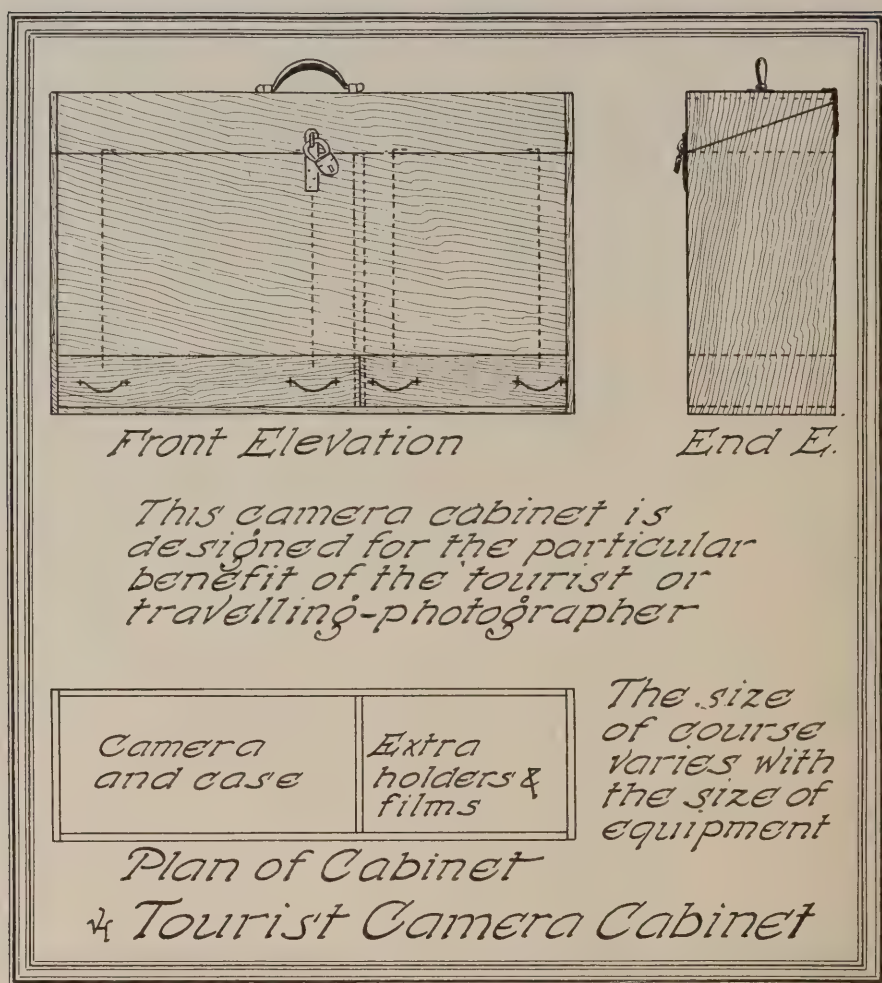
During the noon-day lunch in a town-park, he will spend ten minutes driving up and down the streets. When his trained eye sights a thriving business, his better judgment will say:

"Get thee hence and photograph the proprietor in his loved haunt." The picture or pictures are cataloged and, upon the return-trip, the deliveries can be made and the crisp dollar bills captured.

But, when such a trip is taken, it is desirable to have a suitable container for not only the camera but extra plates or films, and if printing is done, for paper, chemicals and equipment such as filters, extra lenses, and other accessories. A good carrying-case soon becomes bedraggled when stowed away with camping-equipment; it should be housed so well that dust and rough abuse never reach it.

For that reason the drawing of the camera-cabinet is presented herewith. Briefly only the idea is presented, for obviously all dimensions would have to vary according to the size of camera. The cabinet consists of a hardwood-case which is divided into two parts vertically and also two horizontally. The upper deck contains one compartment for the camera in its case, and a smaller compartment to take six, twelve or more plateholders.

The bottom consists of two drawers which



TOURIST CAMERA-CABINET

DALE R. VAN HORN

pull out but are novelly locked with four straight wires which extend down through holes in the front of the cabinet and fit into holes bored for them in the front panels of the drawers. If you find it difficult to bore such small, long holes through such thin wood, cleats can be screwed to the inside of the compartment and the wires run through these. Corresponding cleats or blocks are attached to the inside of the drawers. When the wires are pushed down and the turned-over ends set so that the locked cabinet-top holds them in place, it will be impossible to open the drawers. Thus one padlock, holding hasp and staple together at the top, locks all four compartments.

If you are handy with tools, you will be able to make this cabinet yourself. Use wood one-

half inch thick and fit all joints carefully. Provide the top with a handle from an old suit-case or traveling-bag and further strengthen the top with cleats on the under side, for the packed cabinet will weigh anywhere from twenty-five to seventy-five pounds. If you have the cabinet made, better spend a little more and have all corners protected with brass-lugs which are made especially for the purpose.

By all means, line the two upper compartments with cotton-flannel; and, if the drawers are to carry delicate and expensive equipment, too, pad these well with the same soft material.

If this cabinet is made to carry the camera with twelve additional plateholders, you will be able to take thirty-six pictures without refilling. Or, by making the plateholder-compartment

large enough to take the extra holders and two or three dozen boxes of films, the outfit has a potential capacity of fifty or more pictures.

The outside of the cabinet should be given a coat of filler, then two or even three coats of

varnish or good, weather-proof paint. Although it is no larger than an ordinary suit-case, this cabinet will confine practically all photographic equipment under one cover, and the design is such that transporting it by hand is convenient.

Impressions of Central America

EDWARD L. HARRISON

TO me, the Caribbean breathes of the adventurous and romantic past. It is a sea of deep blue waters, fringed with palm-crested shores and canopied with azure skies; a land of flaming sunsets and jewelled nights. I seem to see beyond each low-lying island a rakish craft, filled with savage buccaneers, waiting to spring upon the carved and gilded galleons, to murder, burn and rob. The lands breathe of adventure. All through these smiling and peaceful countries, and over these magic seas, Captain Kidd, Morgan, Teach, Blackbeard and L'Ocelon murdered, burned, tortured, and robbed, until their very names are a byword to this day. The scenes of their crimes are not forgotten. In St. Kitts, Jamaica, Barbados and Tortugas, the stories still linger, and the names are cursed. And it is said that their voices are sometimes heard, on stormy nights, rising in weird chorus, chanting a drunken rhythm among the distant islands.

And the legends of buried treasure are strangely real—a tarnished doubloon, a bit of broken chain, a faded chart are still sufficient to draw men together to speak with bated breath of the

chance of finding a fortune, and to spend days and months upon the wildest quests.

Old Panama is but a few blackened stone-towers which stand as gloomy sentinels amidst the tropical jungle, mute and damning evidence of Morgan's hellish work. But the spirit of the old buccaneer still broods over the scene of his crimes, and his heavy tread and clanking cutlass can be heard on the deep, dark nights as he passes over the ruined stone-bridge to wander restlessly amid the fallen stones of the city he pillaged.

The spirits of dead men haunt new Panama also. Thousands upon thousands, rank upon rank, they look down from the leafy heights and tramp through the jungle. In fancy, I have heard their voices giving orders in a strange tongue, above the measured clank of their invisible engines, as they still endeavor with skeleton hands and rusted machines to carry on the task for which they gave their lives with such reckless bravery. And they died by tens of thousands, and died horribly, knowing not that the dread messenger of death was but the seemingly harmless mosquito perched lightly upon



ACROSS THE CARIBBEAN

EDWARD L. HARRISON



CAMERA SKETCHES OF CENTRAL AMERICA

EDWARD L. HARRISON

1 ANCIENT INSCRIPTION

2 GATUN LOCKS

3 OLD MAYAN STELE

4 HORSEMAN, GUATEMALA

5 GRASS HOUSES, GUATEMALA

their hands—nay, had one told the fact, they would have laughed, and gone on to death unbelieving.

Seventy miles inward from Barrios, in Guatemala, lie some of the ruins of the ancient Mayan nation, the oldest in the New World. Before Augustus Cæsar, before Hannibal, and two thousand years before Columbus found the new world, these people had begun gathering the secrets of science, religion and government, and by the beginning of the Christian era had built up a system of chronology second to none in the Old World. Their sages had timed the sun, moon, and planets, had recorded eclipses and measured the years and recorded them accurately. Their rulers had worked out a practical and stable system of government, which endured nearly as long as that of Greece and Rome, and their mechanics have left an imperishable record of these facts. Their hieroglyphic writing is terse and effective. Three principal symbols prevail: first, the signs of time—days, months,

and years; second, signs of persons or places; third, signs of events or objects. Their system of enumeration is both simple and effective—a dot represents one—four dots stand for four. Five is represented by a short bar and with this combination, modified by the position in which the signs are placed, the calendar is recorded so accurately that today the scientist standing before a monument, can read the exact day it was dated, though it were a thousand years ago.

And, strange to relate, upon these time-worn monuments in this obscure land, we find a legend as old as the oldest clay tablets of Assyria—the time-honored story of the flood that destroyed the world—and the record is plausible enough. Ten thousand years ago, in the valley of the Mediterranean, men lived and grazed their flocks in peace—and one night an earthquake rent the rocky wall between the peaceful valley and the wild Atlantic, and loosed the terrific waters upon the fertile fields, and the surviving remnants of the nation so suddenly engulfed, fleeing in

terror before the awful cataclysm, carried the legend of destruction to all the lands of earth and recorded it in a hundred tongues.

Archaeologists place the Mayan ruins as dating from 500 B. C. to 700 A. D. The general plan shows a temple or group of temples on an elevation thirty feet above the plain and about two hundred feet square. The temple faced south, looking over a paved court two hundred feet by 1,500 feet, with huge stone pedestals, surmounted by monsters, flanking a great flight of steps leading from the temple-plateau to the courtyard. The court was bordered with monolithic carved pylons, or steles, thirty feet in height, weighing about forty tons and inscribed and sculptured on all surfaces, also carved with figures in high relief. The images have hooked noses and high cheek-bones. The pylons are usually tapered toward the top and some of the carving is hand-colored. The stone is a hard, dark gray sandstone.

There are also several great altar-stones scattered about. These are as large as an automobile and of irregular shape, carved on all sides. No doubt, at least ten feet of earth and vegetation deposit covers the whole courtyard and for this reason no small stones are in evidence.

Probably the altars are both ceremonial and decorative in intent and some of the inscriptions have been deciphered, leading to the belief that they were erected on feast days at stated intervals, as a sort of ritual or religious ceremonial. The writing records dates, calendar events, astronomical data, such as eclipse of the sun and moon, and the phases of Mars and Venus.

The heads of the great monsters crowning the pedestals of the temple-stair are full-sized elephant heads, beautifully carved. This carving of the heads of an animal never found in the Western hemisphere, raises instantly the conjecture that this people either came from the Old World or communicated with it at some remote period.

The temples are built of small ashlar blocks on various floor-levels and of several stories each. Probably, there were wood-beams and roof over the walled areas and possibly over the pylons. Cornerstones and sills are inscribed with characters. No doubt, the great temple was a place of public assembly and sun-worship. In its finished condition it must have presented a glorious spectacle when the sun swept from his meridian over the great mountains to the south and smote upon the carved and gilded structure, filled with gaily dressed worshippers, while the priests stood with uplifted hands amid the clouds of burning incense, chanting the service. Indeed, it must have been a remarkable scene.

The imagination speculates how this people have passed from the stage of life. Did the great mountains rain fire upon the land, snuffing out a whole nation with poisonous vapors? Or did the tiny winged messenger of death, the yellow-fever-carrying mosquito, annihilate the race? Whatever the truth, they have passed from history and memory save for the work of their stone-masons, over which the archaeologist furrows his brow.

A few words as to photographic equipment and methods. My own outfit consisted of three cameras and at no port did I fail to find film to fit at least one of them. Vest-pocket sizes seem to be most popular and widely distributed. I bought film in moisture-proof containers and in paper-boxes, and could see no difference in results. The much feared tropical humidity had apparently no effect on cameras, lenses or film. None of my instruments were of tropical model. The Graflex was a $2\frac{1}{2} \times 4\frac{1}{4}$ model, commonly known as 1A size, fitted specially with a six-inch Carl Zeiss Tessar of F/4.5 aperture and five-time Wallace filter, and it was used wide open at fast shutter-speeds in many cases. In fact, all my lenses were used wide open on this trip, at high shutter-speeds and I have never had better "luck" with films. The tropical light is searching and exposures of 1/100 without filter, and 1/25 to 1/10 with screen, were ample. Many pictures were made at dusk and in the rain, with fair results.

The other two cameras were an Icarette, size $2\frac{1}{4} \times 3\frac{1}{4}$, roll-film model with four-inch Carl Zeiss Tessar F/4.5, and a Goerz roll-film Vest Pocket Tenax with Dogmar F/4.5 lens. The Ica proved the best in the rain, and the vest-pocket was used largely while rambling through the by-paths in search of local color.

The plaster and stone houses and monuments require brief exposures, but the jungle and the complexion of the natives is usually underexposed. I had a portable, folding tripod along; but did not use it. The light is unquestionably twice as rapid in effect on film as that in the central section of the United States.

One item I would add on another such trip—a good telephoto lens for the larger camera for distant shore-views. Since my return, I have fitted a Plaubel anastigmat fixed-focus telephoto lens to my 1A Graflex, and expect to obtain many attractive bits with this device on the next trip.

Regarding freedom for use of cameras, no difficulty in this respect was encountered during the whole trip; but I understand that it is not wise to attempt to photograph the canal fortifications of which Uncle Sam is justly proud.



A YELLOWSTONE BEAR

CLAUDE P. FORDYCE

Outdoors with a Camera

CLAUDE P. FORDYCE

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Part II. Getting Good Pictures

THE experts will tell you that the greatest cause of failure in amateur photography is underexposure. One firm which does a large photo-finishing business goes so far as to say that not fifty per cent. of the exposures sent in are correct. Exposure is the pivotal point in outdoor photography. Your camera and films or plates are just a means to this end, and the conditions of the atmosphere influence so much the subjects which the outdoor-man has to photograph that only the most expert can rely upon his own judgment in estimating exposure correctly. Erring on the side of overexposure does no particular harm as correction can usually be made in printing.

The only safe plan in exposure is invariably to employ an exposure-meter which calculates on the basis of known speed of film, type of subject, lighting on subject and diaphragm-opening. The actinometer has a piece of sensitive paper which measures the strength of the light which falls on the subject; but it is not the general illumination which makes the picture—it is the light that is reflected *back* from the object that makes the picture and we well know that a white object

reflects several hundred times more light than a black object and a polished surface more than a dull finish. The eye is incapable of judging the actinic value of light. Yellow, for example, seems bright to the retina, but in reality it affects the plate only slightly.

The most practical guide for exposure, under all conditions, is the series of tables worked out on a basis of thousands of exposures, as in the Harvey Exposure Meter or the Burroughs Wellcome Exposure Calculator. These consider the time of year and day, the light, subject, speed of film and lens-stop. The Harvey Meter works on the mechanical slide-rule plan. G. L. Harvey says that the small stops help to correct errors in judgment of exact distances when focusing with the focusing-scale. Although these meters supply a chart of the speeds of all plates and films, the difference is not so important as the time required for various subjects under the same light-conditions.

Do not mistake that a strong light and clear air mean speed-exposures; this would result in harsh highlights and unduly heavy shadows; but one can get details and fine tone gradations by giving a longer exposure on a tripod and

using a small stop. The nearer the object, the larger the lens-aperture one should use. Distance requires a very short exposure. Generally, with a three-time color-screen, stop to F/22 and expose 1/10 second. With trees in the foreground, when using a three-time filter, stop to F/16 and expose two seconds.

One of the most difficult pictures to get is a snow-capped peak in the background and dark forest in the foreground. This combination is well illustrated in the pictures of Mt. Rainier made by A. H. Barnes. "The trees of the immedi-

in a near position with an immediate foreground of green slopes and trees in full sunlight.

On glaciers, lessen the exposure to one-third the above. A. H. Denman's exposures of snow-fields in summer, a distant view with clouds, use stop F/32 and 1/50-second exposure with a ray-filter. For winter-views of snow use stop F/16, 1/50 second in a good light; and, if the light is dull, stop to 4 and give 1/25 second. For moonlight-views of nearby snow-peaks with lens wide open, one to three hours, and a snow-covered cabin with lighted windows one hour.



ELK IN TIMBER

CLAUDE P. FORDYCE

ate landscape aid by giving distance and altitude to the subject," says Mr. Barnes, "and these trees, having the least actinic light, require a long exposure and the mountain, forty miles away, outlined on the horizon, displays high actinic rays of white, blue, violet and ultraviolet which require the least exposure. He uses a filter for full color-values, a plate sensitive to this filter, a long-focus lens, a small stop and a long exposure. Thus the exposure data on one of his famous views are: stop $\frac{1}{4}$ inch, exposure, 30 seconds, at 3.30 P.M. early in October, Isochromatic plate and five minutes' exposure. With a medium filter—three-time—I have given, with good results, two seconds' exposure, stop F/16 orthochromatic film, in mid-afternoon, of a mountain

For cloud-effects turn the camera to the sun and shield the lens, expose 1/50 with stop F/32. The best cloud-effects are made with the camera on a tripod—expose once for the sky and again on another plate for the ground and combine the two in printing.

Waterfalls and foam reflect brilliantly the white light, so expose quickly to catch the falling spray, then expose fully to get the surrounding rocks, let us say, at a stop of F/16 and 1/50 second and then combine the two in printing. The double exposure is also useful in making camp-interiors. Make 1/50 second exposure to get the windows; and, with the camera in place, cover the windows outside and make a flashlight for shadow-details. In flash-lighting always allow



A MOONLIGHT-EFFECT CLAUDE P. FORDYCE

the lights to burn, otherwise people will have an unnatural stare and dilatation of the eye-pupils. In flashlighting a camp-fire scene, have the group face the fire in full view of the camera; arrange the logs in the fireplace so as to shield the lens from the direct light of the camp-fire which should be small; then, if you will throw on a little saltpeter, the fire will flare up like a flame instead of a shapeless glow. Stop the lens to F/6, open the shutter and throw into the fireplace a teaspoonful—better the flashsheets which are recovered if you spill them on the ground—of flashpowder which has been wrapped loosely in a paper.

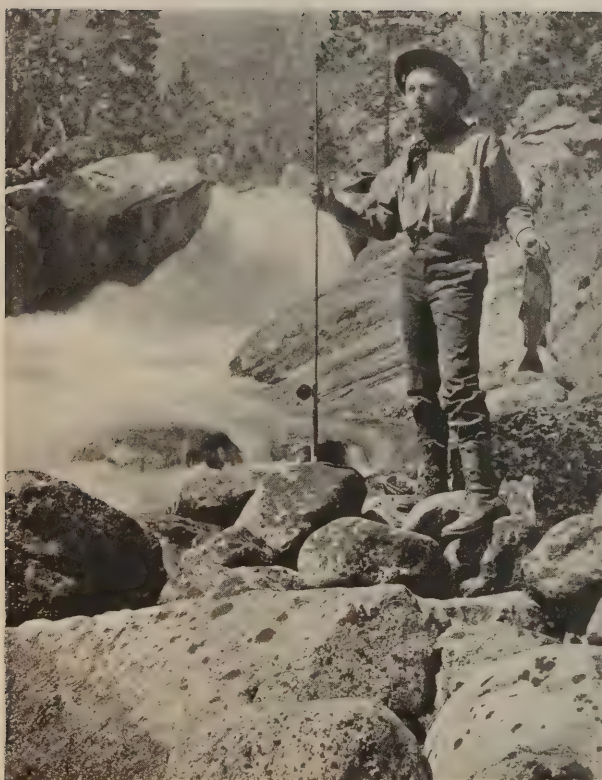
We do not all have the opportunities at wild-life photography which S. N. Leek of the Jackson Hole enjoys. He is one of the U.S. Government feeders, and the starving elk become quite tame; and, in addition to ease of approach, he gets snow for a background but the majority of amateurs find their quarry in deep woods and on the jump. What would it mean to us now to have pictures of the immense herd of buffalo which roamed our plains not so many years ago?

G. W. Shiras, 3d, told me that he was going into the Kaibab Forest last season to study the large herd of mule deer which will soon be in serious peril, on account of failing food supplies. He was also going to try to photograph the famous white-tailed squirrel, which has never been photographed. From personal experience I know that these animals must be photographed in daytime with long-focus lenses or attracted by bait close to a blind in which the camera is placed.

A photographer experienced in wild game-habits directs that one should locate the accustomed habitat of the animals and build a blind two days before making the pictures so that they will get accustomed to it. It must be on the down-wind side of the expected position of the animals; and, if there is no prevailing wind, build several hiding ambushes. Most animals are quick to see a person against the sky; but if an opaque screen is in front of the intruder they will fail to see him. Nocturnal animals will make their own pictures, if a fine black thread—allow for shrinkage when wet—is stretched across their path and connected with an automatic camera and flash-ignition apparatus. This is best arranged with a blank revolver-cartridge fired by a pin or hammer released by a hair-trigger. The powder is pressed down against the end of the cartridge with the wad left out. Electrical apparatus is good, although uncertain, especially in the tropics. Of course, animals will jump at the flash; but they are too late, for their image is already on the plate.

The wild animal photographs of Aeppeler and Stierle are some of the best which have been made. They consider the automatic camera the best method for day or night pictures, as it produces more realistic and more certain results than the method of ambush where one's patience is soon exhausted, or the method of using the hand-flashlight which attracts the animal by a headlight. Their flashlight-machine operates the camera. A fine, black silk-thread is stretched across a possible pathway and the other end is attached to a tree or a rock. Deer follow natural paths or runways and are to be found early in the summer feeding on aquatic plants around lakes and go there to escape insects; salt-licks are good places also. Raccoons are to be found along water-courses in search of food. Beaver are hard to get in action and their homes are remote from civilisation.

Moonlight-views, in most cases, are cleverly exposed sunlight-scenes made across the water just after sunrise or a half-hour before sunset, with the camera pointed directly against the sun while it shows through clouds or its rays illuminate the edge of some heavy dark cloud-



THE POSED PICTURE—AVOID IT! CLAUDE P. FORDYCE

mass. An exposure of $1/25$ second at stop F/8 brings out the clouds in gorgeous relief, invisible to the naked eye. Such negatives are to be printed quite dark to enhance the "moonlight" effect.

Tank-development by the exact method of timing gives the greatest percentage of good results. The average person cannot well correct an error in exposure in the development, for the judgment of properly developed films or plates is acquired by but few. The tank is the only method in the field; and we urge field-development to check up on results, and in hot climates development soon after exposure is imperative because, even if films are protected in the special damp-proof cans before exposure, they are not after exposure. The roll-film tank with the preliminary transferring of the film to apron is all done in daylight; but darkroom-conditions are needed to transfer the film-pack sheets to the holder which goes into the developing-tank. In my use of autochrome plates, I do the changing in the light-proof changing-bag in which I insert both hands, and even utilise the bag in trans-

ferring exposed films into the rack and place them in the tank full of developer. This does not require much room, as I use $2\frac{1}{4} \times 3\frac{1}{4}$ films.

The powders recommended for use with the particular tank are used. Since temperature is most important, a thermometer is an essential part of one's kit. Some washing waters will leave a fine deposit of lime-particles on the emulsion; this is harmless, but is easily removed by swabbing the film with a tuft of wet cotton. In the final washing out of the hypo, I always use one of the so-called "hypo eliminators", which allows one to begin drying the negative in three minutes. One appreciates this method, too, when there is an insufficient supply of water for the usual twelve changes. After the plate has been cleared in the hypo-solution one washes it for a minute and transfers to water to which has been added enough potassium permanganate to turn it a light pink. Hypo will turn this solution clear, so repeat treatments in fresh pink-solutions until no color is discharged and it stays pink. Organic matter will also turn the permanganate solution clear; but not so fast as hypo does. The

commercial eliminator called "Hypono" is really the most effective for the purpose.

Hot climate photo-finishing meets the first handicap when our solutions do not keep cool enough to proceed with development. Melting of the emulsion occurs on films at 80 degrees F and on plates at 90 degrees. A particular study of getting good negatives under torrid conditions has been made which will enable one to have first-class results, even if the temperature cannot be lowered less than 80 degrees. The procedure is very simple and entails but little extra equipment and is indispensable for hot-climate photography.

For a prolonged journey, films should be procured from the manufacturers with the specification that they be sealed in tropical containers. On a mountaineering trip in Glacier Park, I had all my films so protected and was indeed thankful; for the packs were often thoroughly wetted, but all films came through intact and good pictures were procured. When so encased, films retain their recording-quality for a long time; but when they are taken out, exposed and returned to the can and sealed with adhesive tape they do not keep well and so should be developed as soon as possible.

The principle underlying the process of high temperature development is to harden the film, for we cannot consider cooling the solution; it being, as a rule, impractical under tropical conditions. With proper hardening, films can be developed in a temperature up to 80 degrees—all photo-manuals advise keeping the baths down to 65 degrees under ordinary conditions—and plates up to 90 degrees and we will assume that lower temperatures cannot be obtained.

The hardener may be used either before development or between development and fixing, and both must be carried on in darkroom surroundings unless the preferable tank-method is employed.

1. Choose any one of the following: *a.* Immerse for five minutes in a bath consisting of formaline five drops and water ten ounces. *b.* Immerse for fifteen minutes in a solution of chrome alum one ounce and water ten ounces. *c.* Immerse

for fifteen minutes in alum one-half ounce and water ten ounces. After any one of these hardening-baths, wash the negatives and then put them through the developing-and-fixing processes.

In drying negatives where the air is extremely humid or where the air is dry, with dust blowing, we must hasten the process by immersing the plate in grain alcohol; or, in emergency, immerse for ten minutes in formaline one part and water fifty parts to harden and then pour over the negative water which is just below the boiling point and set before the fire to dry. A cloth-screen will keep dust out.

Necessity once put ingenuity to a test. I was on a wilderness trip and had broken my ground-glass. When my pardner went to the settlement for supplies he called at a store and got some emery dust which I mixed into a thin paste with water; and, placing some of this mixture between two plates which I had cleared of emulsion, I rubbed the two together in a circular motion until both plates had an even and fine-grained ground surface.

In caring for your camera on a trip, three factors are most apt to cause trouble—dampness, dust and cold. Even carrying the camera in a shirt pocket may result in perspiration interfering with the shutter-leaves. Damp salt-air will do the same. Dust is apt to gum up the shutter and move freely in the bellows, thus causing pin-holes in the negatives. Under such conditions, I carry the camera in a balloon-silk sack. If there is much danger of total immersion in water, as on a canoe-trip, one of the tightly-closed plate-tanks will keep every part dry. In winter, have the factory wipe all working parts free of oil and keep the camera outdoors where moisture will not condense on it, for it will indoors and then freeze when carried outdoors.

Photography is a worthy addition to your vacation-trip and its technique is easily acquired. What most amateurs need is more attention to composition and focusing, with a definitely lengthened exposure in most cases. When this is done there will be less haphazard pressing of the button and blaming the photo-finisher for the mistakes he does not make.



Practical Kinematography

HERBERT C. MCKAY

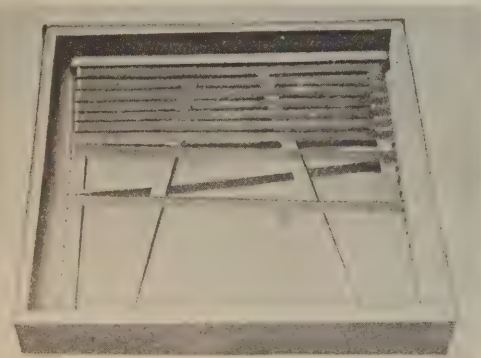
(Book Rights Reserved)

Chapter V. The Laboratory

IF you are confining your efforts solely to news-work, you will not have to worry about the laboratory-work; for, as soon as your film is exposed, you ship it at once to the news-editor. However, if you are doing industrial work, you will either have to do your own work, or have it done for you in some commercial laboratory. The method chosen depends greatly upon the amount of film you will have. If you have a few fifty to eighty-foot pieces, it will probably be best to do this work at home; but if your exposures run into the hundreds of feet, by all means send it to a large laboratory for finishing where the facilities are at hand.

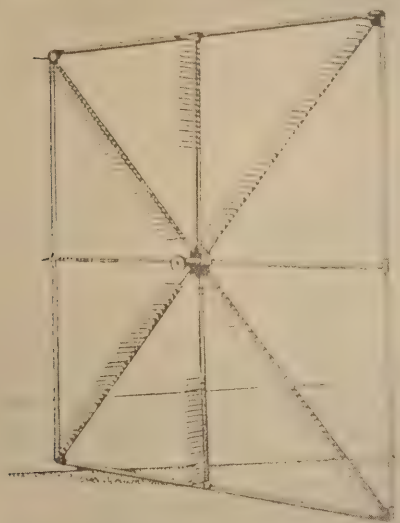
I once superintended the building and equipment of a small kiné-laboratory. I say small,

a Stinemann system was also used for emergency and test-work. A complete still development outfit for 8 x 10 photographs was included. The printer was a Bell & Howell continuous, and later a small step-printer was



DEVELOPING-TRAY

HERBERT C. MCKAY



THE PIN-RACK

HERBERT C. MCKAY

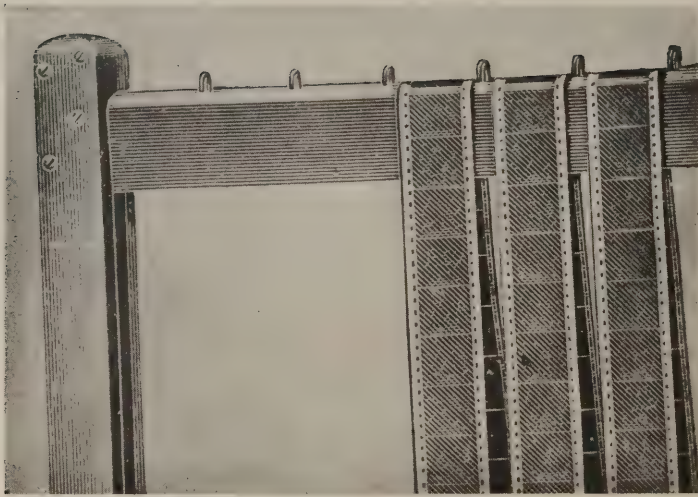
in the sense that it in no way could be compared to the huge commercial plants; but this small laboratory has a capacity of about 1200 feet per hour which is a fair amount.

The building for this laboratory cost more than \$3000, as it was nicely finished in stucco outside. The equipment cost even more than the building. Tanks were installed for regular develop-

ment. The title-stand was permanent with dark cabinet for double-exposure work, lighted by Cooper-Hewitt lamps. Three drying-drums of 600-feet capacity each were installed. In short, the equipment seemed to be complete, yet the producer who had had this laboratory installed found it economical to have his films finished in a large commercial plant. Why? Because it was most difficult to keep the water for washing the film at the proper temperature, and because it was found to be almost impossible to avoid dust-particles. It would have cost more than the combined cost of building and equipment to have provided for these difficulties. The large laboratories have a water-supply at a constant temperature the year around and the air is washed and filtered before entrance to the workrooms. A bacteriological laboratory is the only place I know of which can be compared to a large film-finishing plant, for the absence of dust.

For home-use you may finish films for yourself; but if you are making industrial films, have it done in a large laboratory.

For this reason, the apparatus I shall describe is limited to comparatively short strips, and



RACK CONSTRUCTION

HERBERT C. MCKAY

the apparatus may be used in the ordinary dark-room which may be made or improvised.

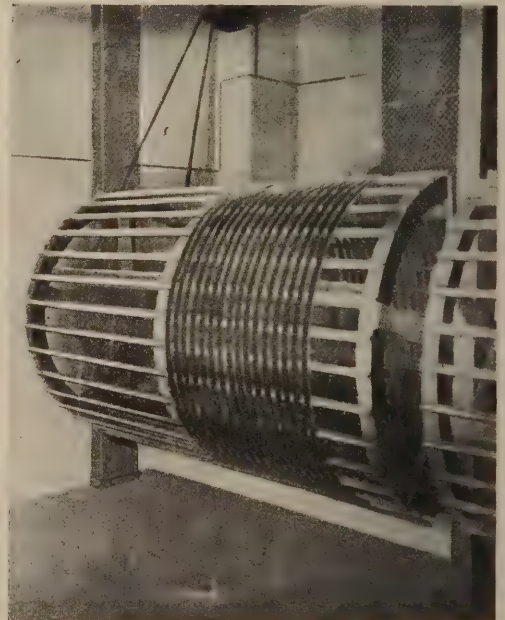
You will need racks for the chemical baths, tanks for these racks and a drying-arrangement. You will also need some kind of a printing-machine. These I will describe later.

The rack is made of two cross-arms with brass-pins inserted as shown in the illustration. The whole affair is painted at intervals with a good tray-enamel. The tray is merely a shallow box large enough to take this rack. The tray should be of cypress or cedar, and made of matched material, that is, with a tongue and groove. When it is assembled, it is warmed over a fire, and painted inside and out with boiling paraffine. This is repeated as long as the wood will absorb the paraffine. Then it is allowed to harden for four to six hours and then painted with tray enamel, followed by a second and third coat of enamel on the two succeeding days. This should give a tray which is thoroughly waterproof.

The following table will give the dimensions of the developing-rack when the pins are placed every one-half inch, beginning three inches from the center.

| <i>Feet of film</i> | <i>Length of arm from center</i> | <i>Total length of arm, or diagonal of containing-tank</i> |
|---------------------|----------------------------------|--|
| 30 | 8 inches | 16 inches |
| 38 | 9 " | 18 " |
| 47 | 10 " | 20 " |
| 57 | 11 " | 22 " |
| *68 | 12 " | 24 " |
| 80 | 13 " | 26 " |
| 89 | 14 " | 28 " |
| 107 | 15 " | 30 " |

The twenty-four inch rack, marked (*) is the largest which may be handled with ease. This does very well as a fifty-foot rack, for some leeway is desired unless the camera-capacity is strictly limited to fifty feet. It is not always possible to terminate a scene just at fifty feet. The half-inch spacing is better, for it gives plenty of room for developer-action. However, if longer



PROFESSIONAL DRYING-DRUM

H. C. MCKAY

strips are to be used, or if a compact rack is desired, this may be reduced to three-eighths or even a quarter of an inch. In using a quarter-inch spacing, it is necessary to raise and lower the rack in the solution a dozen times or more, to clear the film of air-bubbles which seem to stick more closely to the closer wound film. It is also good practice to raise and lower the rack each thirty seconds of development. With a timer set to ring at such intervals, this may be easily done, as a fairly deliberate movement is all that is necessary and should not take more than two or three seconds. A quick raise and drop will cause more bubbles.

Beginning $2\frac{1}{2}$ inches from the center the following capacities are obtained, by spacing $\frac{1}{4}$ inch.

| <i>Feet of film</i> | <i>Length of arm from center</i> | <i>Diagonal of required tank</i> |
|---------------------|----------------------------------|----------------------------------|
| 30 | 6 inches | 12 inches |
| 42 | 7 " | 14 " |
| 57 | 8 " | 16 " |
| 73 | 9 " | 18 " |
| 89 | 10 " | 20 " |
| 109 | 11 " | 22 " |

The tank-measurements are the diagonals required. The corresponding sides are:

| <i>Diagonal</i> | <i>Side</i> | <i>Diagonal</i> | <i>Side</i> |
|-----------------|-----------------|-----------------|-------------|
| 12 | 9 | 22 | 16 |
| 14 | $10\frac{1}{2}$ | 24 | 18 |
| 16 | 12 | 26 | 20 |
| 18 | 14 | 28 | 22 |
| 20 | $15\frac{1}{2}$ | 30 | 23 |

These measurements are not mathematically correct, but increased so that there will be operating-room in the tank for the rack.

The developer used for both prints and negatives is the Eastman No. 16 developer; but the same solution should not be used for both negative and positive. The formula for this developer may be found in "Kinematography for the Amateur" or upon the instruction-sheet found in each can of Eastman kiné-film.

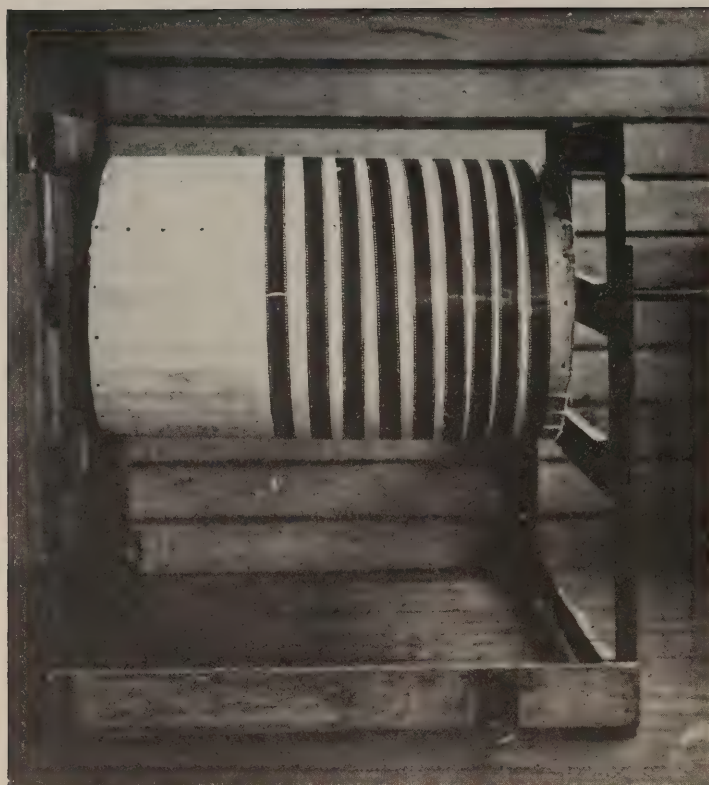
The drying-rack is a drum, mounted to turn freely. This drum may be solid, or of slats fastened lengthwise upon the faces of two wheels. If a solid drum is used, three or four additional slats should be used, which are held out from the face of the drum by springs, as the film shrinks in drying; and, if provision were not made to care for this, the film would break or tear loose at the fastened ends. The illustration shows a drum which does very nicely for amateur use. This particular drum is cloth-covered and the film secured at the ends by passing under an elastic band. This allows the film to creep in shrinking; but holds it firmly enough to prevent its flying loose when the drum is revolved at a moderate speed. This drum is made solid, so

that it may be used in reversing the 16 mm. film. In exposing the sub-standard film to white light for reversal, it is necessary to prevent the light from striking the back of the film. The film is placed on the drum emulsion-side out and the drum revolved at a speed of from fifteen to one hundred revolutions per minute, thirty being about right.

In constructing the drum, the following calculations are used. The 16 mm. film requires one inch lateral space for each wrapper or layer, and the 38 mm. film requires two inches. Do not attempt to wind too closely. As diameter and length are variable, one has to be made a constant. This is usually the diameter, as bicycle-wheels are often used, and the length made whatever necessary. We must now determine the circumference of the drum. Let us say it is to be twenty inches, and we wish to construct a drum for one hundred feet of film. The circumference will be 62.832 inches, let us say five feet, so upon every two inches of lateral surface we can wind five feet of film, or upon every foot we can wind thirty feet. If we then make the drum three and one-half feet long, we can accommodate one hundred and five feet of film. A given drum has fully double the capacity for 16 mm film. Using this method of calculation we can construct a drum of any given diameter for any given length of film.

Tinting the film is a process usually included in laboratory-work, but it is inadvisable. The Eastman Kodak Company now make positive stock in a number of tinted bases, quite a sufficient range for all ordinary purposes, and the laboratories will use any color directed at a slight additional cost, far less than the cost of dye-tinting. The choice of color is one which requires care. Moonlight and snow pictures look well upon blue stock; fires, volcanoes and so forth upon red. A spring dawn will go on pink stock, and shadowy interiors or interiors whose decorations are delicate will look well upon violet. Violet is also useful in many cases where the scene is supposed to be lighted by artificial light, such as banquets and social affairs. Sunlight is well rendered by yellow film. Many directors have yellow stock used regularly for all out-door scenes which are lighted by medium light; and for very hard lighting such as beaches, deserts and so forth, the amber film is widely used. Black-and-white gives a hard film under almost any circumstances. Sea-scenes are usually printed upon blue or green stock, and scenics or woodland scenes are often printed upon green.

A study of the films shown in theaters will do far more to give a thorough understanding of the proper tints to use than can any amount of



HOME DRYING-DRUM

HERBERT C. MCKAY

printed instruction. In fact, go to the theater often. Do not watch the play, but study technique, tinting, titles, direction, make-up, acting, lighting and so forth.

Toning usually helps a film; but it is so costly and difficult that the amateur should not try it. When it has to be done, let the commercial laboratory do it; but avoid it as much as possible. One example which is often used is a dawn-scene, printed upon pink stock and toned blue. Thus the sky and all high-lights are a rosy pink, and the shadows are blue. This is effective in landscape-work; but the film should be hard with heavy shadows, so that the half-light of dawn is imitated.

For the present, we shall omit any consideration of printing, for there are some effects which are obtained in the laboratory rather than in the camera, and these will be considered in the next chapter.

Each film should have titles. If you are doing only news-work, all that is necessary is to write these titles out and send them to the editor; but for other branches of work, you will have to

make your own titles. For this purpose the stand and procedure described in "Amateur Kinematography" will serve very well.

Any business which hopes to succeed, must do so largely through advertising. Upon this rule you base your expectations of making advertising-films, so do not overlook the necessity to advertise your own work. One of the most potent forms of advertising in use today is the trade-mark by which each meritorious product is identified as the product of its maker. It is possible to design a trade-mark, simple, easily identified, and capable of being so modified that it may be used in the borders of all titles. In the old days of kinematography, some companies placed their trade-mark on the set and photographed it in every scene. This was a mistake, for it proved objectionable to the spectators. Do not allow your trade-mark to offend; but make it unmistakable. For example, suppose that you call your films, "Independent Films." A circle with the monogram "IF" will appear conspicuously on the introductory title, and after the completion of the film, a tail-piece some

ten feet long appears bearing nothing else. This monogram could be made the basis of advertising, beginning a series of statements, "If ———, If ———, If ———" Then you cannot afford to be without I. F. representation. However, make use of some kind of easily identified trade-mark.

The title in the body of the film should be made as explained in "Kinematography for the Amateur"; but in advertising-film you need to insert titles of various kinds upon the pictorial film. This work is explained under "Trick Titles" in the portion assigned to advertising-films.

These titles will be finished for you just as is

pictorial film, at the commercial laboratory. When the finished film is returned, it is edited in the usual way, by discarding the non-essential footage and joining the various strips of film in their proper order. To those unfamiliar with the process of editing, I recommend "Kinematography for the Amateur" in which all of the steps, technical and mechanical, are explained.

The edition of commercial films requires more study and care than does the edition of home-films, for the commercial films will be viewed by a critical audience.

(To be continued)

By Indian Camp-Fires in the Canadian Rockies

DAN McCOWAN

RESIDING for many years in the heart of the Canadian Rockies, we have long since learned to resist the ever-present impulse to photograph all the marvelous snowy vistas on crisp, clean winter-days, all the wondrous clouds that drift from peak to peak on whistling winds of spring, all the tarns and waterfalls glistening and sparkling in summer-sunshine and all the splendid glories of autumn on the high plateaus. Graceful deer coming daily to the cabin-door for food, are ever attractive subjects, making eloquent appeal to the

photographer. Groups of wild goat and sheep feeding on the mountain-slopes nearby seem to lure the camera from its case. Alpine meadows, framed in stately pine or feathery larch, and with backing of snowfield or glacier, are peculiarly tempting to the pictorialist. And so it comes that in a region where familiarity with Nature's handiwork brings not contempt but an ever-increasing admiration, the ardent camera-worker, in course of time, must dilute his wild enthusiasms with sober judgment and look twice before he exposes once.

But there is bound to be reaction to too rigid



INDIAN TRANSPORTATION

DAN McCOWAN



THE GLORY OF PAINT AND FEATHERS

DAN MCCOWAN

economy in plates and films and perpetual self-denial will in time become monotonous. Hence, when the Assiniboine, the Sarsi and the Kootenai Indians gather from the prairies and from the fertile valleys across the Great Divide, to congregate on Beaver flats beside the Sundance Brook; when tepees are pitched and fires of fragrant wood are kindled; when fraternal greetings are made and councils held; when tom-toms throb rhythmically and tribesmen, shedding drab overalls and dusty flannel shirts, emerge transformed in buckskin of almost incredible whiteness, in blankets that are rainbow hued, in eagle plumes that flutter bravely in the breeze—it is then that we throw film discretion to the winds and embark on an orgy of extravagant plate exposure.

So year after year we anticipate eagerly the coming of these "first families" of North America, never failing to be thrilled by the spectacle of the motley cavalcades winding along deep-rutted trails that were blazed and trodden by warrior ancestors. It is good to be greeted anew by these bronzed people; to hear of their simple family joys and domestic happiness is refreshing; even to share their sorrows is a privilege. For they speak of the passing of mutual friends in such a kindly, dignified way, that one is not conscious of personal loss. And when twilight deepens in the valleys, when the sky is sprinkled with stars, it is an honor to sit about the camp-fires in company with the elder members of the tribes, there

to hearken to thrilling tales, there to vision in the glowing embers bygone days when Indian knighthood was in flower and the grizzly's claws were worn as a badge of courage.

To obtain pleasing photographic studies from these red-skinned subjects demands considerable tact and patience. If one is personally acquainted with the chiefs and councillors there is usually little difficulty in obtaining such individuals and groups as may be desired for picture-purposes. But they must needs be handled gently and greatly humored, for they are not only extremely temperamental, but inclined to be taciturn. In coaxing an unwilling "brave" or "squaw" to face the camera-lens use was wont to be made of a not unpleasing and somewhat harmless fiction. This to the effect that the resultant photographs were intended for presentation to the Great Queen Mother across the seas or to the Big Chiefs at Ottawa who would be disappointed, nay displeased, to find the noble Rainbow Child and his handsome wife missing from among the celebrities of the tribe. To use such "bait" today might yield results among the Esquimaux or the Dog Ribs in the "Land of Little Sticks"; but the Stonies and the Kootenais are no longer children and may not now be tempted by any such chaff as this. A bromide enlargement or two made from negatives of the Chief of the Tribe or a few contact prints which feature a grandmother who is a popular favorite



A PLEASANT TARRYING-PLACE
MORNING IN THE CAMP
DAN MCCOWAN



TATANKA CINCA—CALF-CHILD
TAH-OOSA—MOOSE-KILLER
DAN MCCOWAN

are usually highly prized in the lodges. Such camera courtesy and compliment is appreciated by Red Men and White alike, consideration for and knowledge of human traits being no less valuable to the camera-artist who is working among primitive peoples of the wilderness than to the pressman detailed to obtain an unusually difficult news-picture amidst the rush and swirl of city-traffic.

The Assiniboines or Stonies are our nearest Red neighbors. A once powerful nation, closely related to the dreaded Sioux, they have in recent years rapidly decreased in numbers and now form but a small community in the eastern foothills of the Rockies. The men, when not engaged in hunting, give considerable attention to the breeding and rearing of light saddle-horses and polo-ponies. Trading horses or furs to the Scotch factors at the Hudson Bay posts these native sons became extremely astute in all such business-transactions. Now, even a David Harum would need command of all his wits in bargaining with these enterprising dealers in horseflesh. Keen hunters and withal excellent rifle shots, yet, the young men and boys still delight to practice archery and show extraordinary proficiency in the use of the bow and arrow. The women are highly artistic, fashioning quaint designs in beadwork and embroidering exquisite patterns upon fine leather with the dyed quills of the porcupine. Their drawings or sketches of animals such as the horse, the deer and the bison, bear marked similarity to those engraved on the walls of caves in France and Spain by men of the Early Stone Age.

Of all the habitations of mankind, none seem to lend themselves so well to photography as the tepees or lodges of the Indians of North America. Erected by the margin of a placid lake or set amid a grove of dark green trees, these tents are at all times and seasons in perfect harmony with their surroundings. The smoke from wood-fires, placed upon the floor in the interior of the tepee, emerges through a hole at the apex of the cone-shaped structure and in course of time tans the upper parts of the covering until the color resembles that on a well-seasoned meerschaum pipe, merging or shading downwards from deep umber to the light ochre of new-tanned hides of deer or to the white of sun-bleached canvas. Such lodges may be photographed to greatest advantage in a cross light and from a point where part of each dwelling appears in sun and part in shadow. This to give the rounded effect that is so desirable in tree-trunks, in columns and all such photographic subjects. Designs are often placed upon the exterior coverings of these wilderness shelters;

some conventional, a few mythological, many extremely fanciful, all more or less gaudily colored. Negatives from these primitive drawings may be made to yield lantern-slides which, when tinted carefully, and in the original colors, are invariably pleasing.

Tah-oosa, or Moose Killer is at present ruling Chief of the Assiniboine Indians. Tall, erect and of graceful carriage, he has watched the waning of many a hunter's moon and has heard the trumpeting of southbound swans for over four-score seasons. Hearing him speak in the language of his fathers, for he has no other, is like listening to the melody of water running among smooth pebbles and is soothing as the gentle breeze that sets the aspen leaves to quiver in the sunshine. Living among lofty rugged mountains he seems to have acquired part of their dignity, part of their strength, much of their nobility. Standing with arms outstretched towards the rising sun, this bronze-gold viking of the West greets each new dawn and hails the coming day with inborn reverence and with gratitude profound.

Tatanka-Cinca, or Calf-Child, is by far the oldest and most celebrated Medicine Man among the western Indians. Seated upon a white horse and garbed in a magnificent costume of soft, white leather, the edgings of ermine fur, the frilling of eagle-plumes, he presents an imposing appearance. Reserved, aloof and to all appearance living in a bygone age, this venerable patriarch seems to distrust the camera-lens and is not easily photographed. Indeed, one might well stand in extreme awe of this High Priest but for knowing his favorite brand of cigar and his liking for apple pie. His wife, the sunniest soul in all the camps, is referred to lovingly by all the pioneer white settlers as "Leebie". Smiling, chuckling, often crooning the songs of her childhood days, this kindly lady of the lodges is cheerfulness personified, amenable alike to the winking Brownie of the amateur photographer and to the great-eyed Graflex of the pictorialist.

All day long we have moved backwards and forwards throughout this encampment that, set upon flowery meadow at the mountain's base, proves a pleasant tarrying-place. Engrossed by the bustle and activity pervading camp-site and dwellings, busied with films, with cameras and with notebooks we hardly heed the passing of the hours until the light grows wan and dusk creeps upwards from the valley-floor. Soon the last faint amber tint fades from the mountain-peaks. Save for the sound from distant cataract, the soothing hush of evening is unbroken. Flickering fires die down within the silent lodges; a breath of unsunned air strikes chill. Cometh the Night.



MORNING
WILLIAM T. ADDERLEY





EDITORIAL



American Camerists Touring Europe

THE season of foreign travel will soon be in full swing. It is the chief topic of conversation at social clubs. At camera-clubs, too, members are responsive to the call, and among other birds of passage may be the Editor and his better-half. Increasing sales of cameras at the photographic stores is another sign of desires that point overseas. April is the month that takes tourists to the British Isles where spring-time is most alluring. Every American tourist who is eager to bring home personally-made photographs of memorable scenes and places will provide himself with a camera that is handy and reliable. Never was the market supplied with so large a variety of attractive and efficient models, and at prices that need not embarrass even the most thrifty individual.

On previous occasions in connection with foreign travel, we have suggested how the camera should be used most advantageously. In the present instance, however, we would point out how the camerist may avoid certain pitfalls while traveling and photographing in foreign lands for the first time. The average American tourist, justly or otherwise, has earned a reputation for deportment that is far from flattering. He seems to forget that what sometimes may be tolerated at home, will be frowned upon in the old countries. The fact that the American tourist may spend his money with a lavish hand, does not deter the cultured European from regarding an occasional ill-bred American visitor with contempt. It would be well if some American tourists were to observe the old saying, "When in Rome, do as the Romans do." If a tourist who is ignorant of the customs and the language of France or Italy engages the services of a well-bred and reliable guide, and follows his suggestions, he cannot seriously err. A good way to win their esteem is promptly to express grateful appreciation by a sincere "I thank you", even for the slightest service. It is not a difficult thing to commit to memory and to pronounce correctly, "*Je vous remercie*", "*Mille grazie*", or "*Ich danke Ihnen*"—foreign standard equivalents for "I thank you".

Citizens of our land of the free have returned from abroad complaining of the numerous signs and warnings of "*Verboten*", "*Défendu*", and

"*Proibito*", which they have found annoying. These rules have been established by their respective governments for the benefit of the people, and are obeyed by them without a murmur. Europeans know that America is a land of almost unlimited wealth and natural resources, and a paradise for the opportunist and adventurer. They have heard of our great industries, and of our splendid educational and charitable institutions, and have experienced—many of them—the benefits of our work of aid and relief. And yet they have little affection for our government and for our people. They welcome the American tourist because of the money he spends with them, but rarely admit that he has any other excellence. Yet the real American gentleman is well received everywhere, whether he be a person of wealth or of moderate means. Every patriotic American has a right to be proud of his country; but in resenting adverse criticism, he should exercise moderation. It is not necessary that he should proclaim his nationality, or display the American flag in the chamber of his hotel—as some do—or wear the American emblem in his button-hole. The wearing of this decoration is a fad practised only by American tourists. It may gratify the wearer, but at the same time it announces the presence of "easy marks". And yet it is possible for the educated and well-bred American tourist to engage in friendly intercourse not only with the people of England, France or Italy, but of Germany—our adversary six years ago—and even to form lasting friendships. In public places, as well as when traveling, one ought not to be too eager to make the acquaintance of strangers. Ordinarily, it may be better to let the others take the initiative. It should be remembered that the old saying, "Familiarity breeds contempt", originated in Europe, where it is carefully observed. For all that, the true American gentleman, than whom there is no superior, commands universal respect. It is only of late years that the other sort has become embarrassingly numerous overseas. The touring camerist will find the European photo-supply dealers very obliging, although as photo-finishers, unfortunately, they are not uniformly efficient. The recognised Kodak-agencies are preferable; but to photo-finish exposed films, they need sufficient time to do them justice.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for two years thereafter.

Awards—Advanced Competition

My Home

Closed January 31, 1925

First Prize: J. Vildensky.
Second Prize: Elsa B. Versfelt.
Third Prize: J. Kirkland Hodges.

Honorable Mention: William F. Anderson; James D. Creegan; L. J. Creegan; F. S. Dellenbaugh, Jr.; H. Onishi; M. J. Pecora; A. T. Russell.



Subjects for Competition—1925

"My Home." Closes January 31.
"Miscellaneous." Closes February 28.
"Indoor-Genres." Closes March 31.
"Table-Top Photography." Closes April 30.
"Artificial Light Photographs." Closes May 31.
"Miscellaneous." Closes June 30.
"Front-Cover Illustrations." Closes July 31.
"Real Sunrise and Sunset Pictures." August 31.
"Wild and Cultivated Trees." Closes September 30.
"Miscellaneous." Closes October 31.
"Lakes, Rivers and Brooks." Closes November 30.
"Interesting People and Places." Closes Dec. 31.

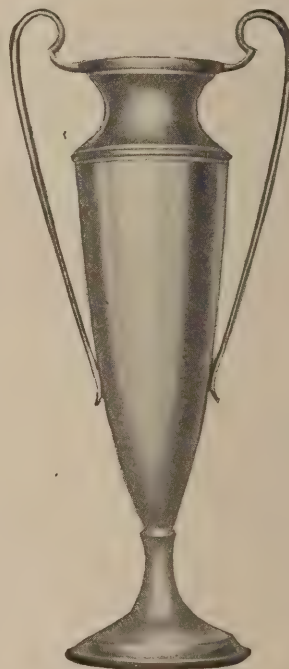


Photo-Era Prize-Cup



A CALIFORNIA PIONEER
J. VILDENSKY
FIRST PRIZE—MY HOME COMPETITION



CHRISTMAS-EVE

ELSA B. VERSFELT

SECOND PRIZE—MY HOME COMPETITION

Advanced Competition

IN "A California Pioneer", on the preceding page, the artist seems to have made the most of an inviting subject. The conception is one of beauty and simplicity, and the treatment shows depth of feeling and artistic resourcefulness. It is the lighting, however, with its attendant shadows, that is the picture's glory. Masterfully, indeed, has Mr. Vildensky used this means to give life and beauty to this quiet, restful scene—an ideal home, so far as outward appearances go. Wisely was the hour of the exposure chosen; for it not only yielded a foreground that is in shadow, but just enough small, supplementary shadows to break the monotony of the front-wall and the floor of the porch. How easily this effect might have been overdone, resulting in a design at once confused and restless. The setting is in a low key, thereby directing the eye of the observer to the sunlit porch, which seems to offer a welcome to the visitor. If one were to look for defects in this pictorial design, he might discover one in the dark multiple tree-trunk which occupies the central space above the roof of the cottage, and another in the seemingly over-darkened sky—by artificial means, it may be. To

have removed the somewhat objectionable tree-trunks from the negative—a simple and pardonable act—would present a sky of quieter aspect. Notwithstanding, the picture can hold its own by reason of dominating excellences.

Data: June; sun shining; 6 p.m.; Ica Trona camera; $5\frac{3}{4}$ -inch Carl Zeiss Tessar, F/4.5; stop, F/8; 1/25 second; Eastman Film Pack; pyro, tank-development; enlarged on Artura Carbon Black, E, Smooth.

What the beholder will be quick to appreciate, in "Christmas-Eve", is the admirable artistic judgment the maker showed in placing the two lighted windows just where they are. He cannot fail to admire, particularly, the technique. It is superb. Nothing finer, of the sort, has it been my privilege to behold. The darkness has been rendered with remarkable fidelity, revealing much detail which, in a daylight-exposure, might appear objectionable. The windows, too, show detail, the curtains, but in a subdued degree. Then, those two tiny lights, in the distance, very properly relieve the impenetrable darkness in that locality. The artist surely is to be credited with an originally conceived and successfully interpreted theme of rare technical difficulty.

Data: Premo No. 9; Rapid Rectilinear; stop, F/8;

exposure, at night, 30 minutes; Seed 26 plate; Actinol tray-development; print, Palladiotype, Warm Black.

In interpreting the present subject, Mr. Hodges went far afield, offering a temporary home placed in the great out-doors. It is a legitimate choice and will be welcomed heartily by our host of observers. The scene, here unfolded, is one of inspiring grandeur—a beauty-spot in the vast Canadian Rockies. The subject is probably the finest of many pictorial contributions with which the artist—an enthusiastic worker—has favored this publication. A better place in the enclosure could not have been selected. Situated at the right, between stately evergreens, and beneath what appears to be a great glacier, the com-

with soap, or the following, which quickly removes organic matter: Potassium bichromate 5 parts, sulphuric acid 5 parts, water 100 parts. First dissolve the bichromate in the water, then add slowly the sulphuric acid, stirring constantly. Take great care *never* to add the water to the sulphuric acid, which would produce an explosion.

Hypo is a dangerous enemy when found anywhere but in a fixing or toning-bath; so it should be an inviolable rule never to employ the tray in which the fixing-bath is used for any other purpose. If, however, unavoidable circumstances should make it necessary to do so, when done with, it is best to fill the tray with a hot solution of carbonate of soda, allow it to soak



WHERE ALL NATURE IS MY HOME

J. KIRKLAND HODGES

THIRD PRIZE—MY HOME COMPETITION

modious tent attracts the eye. Shadows of tall trees decorate the immediate foreground, while no objects disturb the beauty and tranquillity of the landscape. It is a scene that shows this celebrated mountain-region at its best and, doubtless, will exert a spell to which many of our readers will succumb. If so, the artist will have won a victory, in addition to the one in the present competition.

Data: Canadian Rockies; August, 10 A.M.; sunlight; $2\frac{1}{4} \times 3\frac{1}{4}$ Graflex; Tessar lens; stop, F/6.3; 1/95 second; Eastman Roll Film; Rytol; enlarged on P. M. C. Bromide.

WILFRED A. FRENCH.

Cleaning Up

THE utensils used in photography should always be kept meticulously clean; but this is not always as easy as it seems; so we think a little advice will not be amiss. For graduated glasses, a careful washing is usually sufficient; but it is best to use warm water

for quite a time and then wash carefully and rinse in fresh water; it may then be used for its regular purpose.

To remove spots produced by developer use a dilute solution of sulphuric acid. A strong solution of citric acid will remove pyro-stains when fresh. Most acids will clean off iron-stains on glasses, porcelain, etc. Silver-stains will not resist ammonia.

La Photo. pour Tous.

To Render Negative-Paper Transparent

A NEW method to render transparent negatives on paper is given in a recent number of *Il Corriere Fotografico*: Dissolve in a hot-water bath 2 grammes of Venice turpentine in 10 cc. spirits of turpentine; then add while stirring vigorously, 20 cc. of castor-oil, 5 cc. chloroform and 2 grms. vaseline. This mixture is applied to the back of the negative with a hard brush. To assist penetration, pass over the back a hot smoothing-iron, interposing a sheet of parchment or ledger paper to facilitate the operation.



SELECTED HONORABLE MENTION GROUP—MY HOME COMPETITION

- 1 *Beckin Lums*
Wm. F. Anderson
- 2 *A Home on the Willamette*
A. T. Russell

- 3 *My Home*
F. S. Dellenbaugh, Jr.

- 4 *An Orchard Homestead*
James D. Cregan
- 5 *A Smoky Day*
H. Onishi



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



FAIRHAVEN TOWN-HALL BY NIGHT

HERBERT J. HARPER

ARTIFICIAL LIGHT PHOTOGRAPHS

Advanced Competition—Artificial Light Photographs

Closes May 31, 1925

THE making of pictures by artificial light is at once fascinating and productive of exceptional experience in composition and illumination. Moreover, it need not be assumed that it is beyond the ability of the average worker and his equipment. It is not necessary to use expensive lamps or to risk any danger from flashpowder, if the photographer so elects. The modern portrait lamp and the present-day flashlight-outfit have reduced the danger to such a degree that even beginners may obtain excellent results by simply following directions. However, let me repeat the advice to follow directions.

As to subjects, there are many indoors and outdoors, provided the worker has the eyes to see them. Those who live in cities and towns, where there are electric lights, will have many opportunities at home or at night along the city-streets and among public buildings. In communities where recourse is still had to oil-lamps or candles, there are worthwhile subjects which will test the photographer's skill and add greatly to the

pleasure of accomplishment. The charm of the home-circle, the winter-night along the street, the baby at play, the illuminated public building, mother reading and many other subjects will suggest themselves—all of which may be photographed by the intelligent use of artificial light. Moreover, there is no reason to omit good still-life subjects.

Obviously, in artificial light pictures the test comes in the matter of exposure, illumination and composition. For this very reason it appeals to the really interested worker. There will always be those to whom any thing of this sort will be a bother; but I believe that most readers of PHOTO-ERA MAGAZINE realise that success in photography, or anything else, is not won by lolling on "flowery beds of ease". Surely a radio-set is not built or a cross-word puzzle solved without making some personal effort; yet, in photography witness how many seem to think otherwise. Therefore, those of my readers who are really eager to make progress will not merely read these lines and forget to act, but they will prove to themselves and to others the stuff they're made of—how sincere they are about photography and making a success of it.

A. H. BEARDSLEY.



BEGINNERS' COMPETITION



Closing the last day of every month

Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of not more than *two years'* practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous

Closed January 31, 1925

First Prize: John H. Kemp, Jr.

Second Prize: Henry Sill.

Honorable Mention: James Lee; Henry A. Lyner; Paul L. Miller; S. B. Priest; Irving Sparks.

The Usual Spring Camera-Problem

IN this case I do not refer to that ailment which is commonly called "spring fever", although many are stricken with it every year at this time. I have in mind the annual spring problem of what photographic equipment to buy or not to buy—of what outfit to exchange or not to exchange. Some may say that the beginner is not deeply enough immersed in photography to have any problem in this direction. However, let me say that from the moment that the original box-camera, with which he began his photographic career, seems to him to have served its purpose, from that moment he will face the problem of getting another outfit. To be sure, his problem may be simply that of buying or exchanging his box-camera for a folding model. He may not have arrived at a point where the speed of lenses and shutters has any practical value for him. However, he does like the idea of a folding-camera, and there lies his first problem, *viz.*: how to get a folding-camera and where.

Now there are some points which might well be brought out in connection with this buying and exchanging of cameras by the beginner—or by anyone else, for that matter. If the underlying reason to discard the present equipment is due to a real or an assumed defect in the camera and poor results have been the rule and not the exception, then, let me suggest that no change be made until it is definitely proved whether it is the camera or the beginner who is to blame for unsatisfactory pictures. More photographic careers have been nipped in the bud by this germ of exchanging or selling a camera the moment poor results are obtained than by any other means that I know. It is human to blame the equipment first and to dislike to admit that it is one's own lack of skill and knowledge that produced the unsatisfactory results. However, most times the equipment is blameless; but it is sold or exchanged, nevertheless, as a sort of sacrifice-offering to appease our ruffled feelings. This should not be. No camera should be sold or exchanged until we have made good with it or it is clearly proved to be out of order. My experience leads me to say that only rarely can photographic failure be blamed entirely on the camera. Competition is too keen these days for any manufacturer to risk his reputation by letting an imperfect camera leave his factory. Hence, if the sole reason to make a change of cameras is merely poor results, wait and get at the true cause, which, very likely, will be one's very good self.

There are some who delight in high-grade photographic equipment and have the means to buy it. However, their pleasure is solely in the pride of possession and not in the use of the outfit. These good



A BIT OF YALE

JOHN H. KEMP, JR.

FIRST PRIZE—BEGINNERS' COMPETITION

friends keep exchanging and buying cameras and lenses, always with the announced purpose to obtain just the right equipment for their work—what their particular work really is, no one ever knows.

From the experience of a number of years and the observation of all types of amateur and professional photographers, I am led to urge my readers never to exchange or buy a new camera until the old camera has been mastered and until good pictures have been made with it for at least one season. To obtain a better camera is the part of wisdom and should be encouraged, always. However, let not the old camera be cast aside until it has served to prepare the beginner to use the new camera successfully. Moreover, the new equipment should be obtained only after very careful consideration; and only after determining whether or not the new outfit will be used to advantage. In short, it is far more important that the beginner be ready and able to use the new outfit than that he get one. The best camera in the world is of little value in hands that can do no more than use a simple box-camera. True photographic progress is not always a matter of many cameras but rather the individual mastery of just one.

A. H. BEARDSLEY.

Beginners' Competition

THE participants in this department of pictorial effort quite frequently show a degree of artistic ability that is very gratifying. An example of commendable activity is "A Bit of Yale". Comparatively inexperienced—at least, supposed to lack the sound, practical knowledge of an advanced worker and successful photo-pictorialist, the author of this architectural study appears to possess an unusual degree of artistic perception. His photographic skill, also, seems to meet corresponding requirements. A worker of limited knowledge of composition might not think of the advisability to avoid symmetry of design, as in the present instance. Instead of placing the arch squarely in the center of the enclosure, with sides of equal width, our promising artist elects to depart from this principle, with the result that his treatment of the subject is marked by freedom and breadth. Also, instead of making the exposure at a time when the foreground is flooded with sunlight, he preferred to await the arrival of favoring shadows from neighboring trees. The result is a happy one, although, to be sure, the walk beyond the arch is still obtrusively illuminated, and wrongly invites the eye to that spot. Would it



FILLING THE BUCKET

HENRY SILL

SECOND PRIZE—BEGINNERS' COMPETITION

have been possible to delay the exposure until nearby shadows of buildings, trees or bushes could have come to his aid by replacing the present brilliantly lighted areas? Of course, I can make no definite suggestions, as I am not familiar with the conditions under which our picture was made. Perhaps Mr. Kemp did his best in the circumstances; yet it may have been his intention to permit the eye of the observer to rest undisturbed on the interesting side of the structure beyond, or to give a general view—a vista through the arch. If the latter, he has been fairly successful. All the same, he appears to be a careful reader of PHOTO-ERA.

Data: September, 3 P.M.; bright sunlight; $2\frac{1}{4} \times 3\frac{1}{4}$ Kodak; $4\frac{1}{4}$ -inch B. & L. F/6.3 lens; stop, F/8; 1/25 second; Eastman N. C. film; pyro (tray-dev.); print, Artura Carbon Black (Buff).

If "Filling the Bucket", by Henry Sill, were offered for criticism to Our Contributing Critics, the first objection would be to what appears to be a row of piles which extends across the picture, at the top. But it seems to me that our young artist must have thought long and hard before he decided to retain it. What his reasons were for not sacrificing this feature, I do not know. After studying this pleasing com-

position, the discriminating observer may conclude that the row of piles increases the interest of the picture, and breaks what might be considered a monotonous area above the child's head. The novice in pictorial criticism needs only to cover this feature with a piece of paper in order to note the result of its temporary absence, and he will then decide for himself whether it should be dispensed with. As for myself, I should vote to let the picture alone; for to remove the row of piles means to reduce the interest of the picture.

The child, although not assuming the most graceful pose that is possible, occupies an advantageous spot in the enclosure. The costume is happy in its light key and uniformity of tone. The cap might easily have been one of a dark shade and thus have been a distracting object. Thanks to the title, one knows just what the child is doing, as the slightly blurred definition of the hands, and the object they hold, might otherwise leave one in doubt.

Data: Summer of 1923; bright light; vest-pocket camera; Ansco Anastigmatic lens; stop, F/11; 1/25 second; Eastman roll-film; Amidol; print, Wellington paper.

WILFRED A. FRENCH.



OUR CONTRIBUTING CRITICS



THE ROAD

BESSIE O. JOHNSON

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

WHAT was Miss Johnson's conception? In the first place, she made a mistake to handle the inclination of the road. Draw a horizontal line one and a half inches high from the bottom. The space under this line has no interest, and I advise the worker to spare it. Next, I will consider the sky, which is too blank and useless for the picture. Cut off one and an half inches from the top. Then the remaining part seems to me somewhat animated; but the space is too oblong. We must find some way to save the print. Let us return and

consider what was the point of interest. Miss Johnson must have been moved to release the shutter where the ruts appear to approach each other. Looking over the picture, I may omit three-eighths of an inch from the right without trouble, or, rather, it makes the point clear. But I will do nothing more. The tall tree near the extreme left is rather helpful to break the monotony of the outline of the bush. Now enlarge the remaining portion and, perhaps, Miss Johnson will find a better picture—one worthy enough to keep in her album.

DR. K. KOIKE.

"THE ROAD", by Miss Johnson, is like the proverbial curate's egg. It is good only in places or, in this case, in one place, and that is a small part in the center.



WANTED—A FRIEND

SALOME E. MARCKWARDT

YOUR CRITICISM IS INVITED

No doubt, the beauty of the snow and the curve of the road caught the eye; but Miss Johnson has not induced her camera to make the best of it. To my mind, it were better had the camera been held the long-way and not upright; that it were held level so that the horizon-line were straight (this could have been done by trimming the print), and that it were held higher so as to get the curve of the road with less of a wide-angle effect. Had the exposure been a little longer, the tones would be better and the distant trees appear more distant. The development is about right and not overdone. Then, from the pictorial point of view, we have strong lines leading into the picture, but they only lead the eye to nothing. If there were only a little house, or something, at the end of that road!

If the picture were leveled, then the bottom trimmed off to just below the dark bush on the right, and all the sky cut off except about three-eighths of an inch, we should have a nice little view.

Thanks to Miss Johnson for permitting the criticism; for by criticism we learn.

R. M. WELLER.

THE great expanse of bleak sky above the horizon of Miss (?) Johnson's "The Road" gives an impression of impending storm. This picture, like many pictures, can be improved by trimming. If one and one-quarter inches be trimmed from the top, the bleak effect of the sky is overcome and the road, the main point of interest, is brought more forcibly to the attention of

the beholder. Because of the position of the camera, with reference to the curve in the foreground, the road does not have the proper perspective. This can be remedied, and the distracting influence of that dark bush in the right mid-ground removed, by trimming one-half an inch from the right side. This will split the bush, and it will lose its individuality and appear to be a continuation of the low shrubbery on the left of the road. The road itself will regain its perspective and the uneven rut on the right will appear more symmetrical.

It is unfortunate that the road seems to be lost in the little hollow in the background. The only remedy I can see for this is to pencil it in lightly, allowing the two ruts to converge just before they pass out of sight through the opening in the trees on the horizon.

The trimming of the picture, of course, would greatly reduce its size; but an enlargement would restore this, whereas the softening effect of an enlargement would greatly improve the general tone of the whole composition. I would not, however, advise an enlargement to more than $3\frac{1}{4} \times 5\frac{1}{4}$, the trimming having reduced the negative to $2 \times 3\frac{1}{4}$. Perhaps, an enlargement to 3×5 would suffice.

The effect of the snow is very good, except that a little more light would have brought out the richer whiteness of the snow in the country. This would also have relieved the slight melancholy tone of the picture.

ROBERT N. DONLEY.

(Continued on page 240)



OUR ILLUSTRATIONS

WILFRED A. FRENCH



"The Trophy", the frontispiece, is unique in design. The silver-cup—the "Trophy"—conforms to a familiar pattern, which, however, is decorated with a ribbon presumably blue in its original state, although it may have been red because of its dark appearance as rendered. And yet dark blue, yielding to the chromatic correction of present-day sensitised mediums, retains its original tonal value, unless lost in a carelessly made print or, indeed, a poorly executed half-tone. The table-cover with its quiet, ornamental design, serves in a dual capacity with pleasing effect. Nevertheless, the not altogether graceful lines of the trophy and the table find a charming foil in the suspended flower-pot from which extend, in graceful lines, the branches of a vine known, familiarly, as "Wandering Jew". The contrast between the principal object and its affinity—if I may refer to it as such—is delightfully effective in its poetic, almost spiritual feeling. That a print of this emotionally expressive and artistically striking masterpiece of decorative photography was exhibited at two eminent salons speaks well for the wisdom of the committees on acceptance.

Data: June, 2 P.M.; Artificial light, 5 x 7 Studio Camera; 13-inch Wollensak Vitax; stop, F/16; exposure 15 seconds; Eastman Super Speed Portrait Film; pyro (prolonged development); printed on Vitava "K" by projection. Mr. Ogasawara is an Honorary Life Member of the Oregon Camera Club, Portland, Ore.

Our readers are again invited to pay their respects to two triumphant performances in aerial photography by Lieutenant Stevens of the U. S. Army Air Service. The first, page 187, shows Mt. Adams, Washington, rising majestically above cloud-land—"the familiar, business-like rain-cloud (cumulo-nimbus). In the middle distance is a stringy, wisplike elevated fog, and above this is a frozen cloud (cirrus) daintiest and most beautiful of the cloud-clan."

The second, page 193, is probably one of the most magnificent aerial mountain-photographs ever made. It represents, in a supreme technical effort, the precipitous peaks which rise to a height of from 12,000 to 13,000 feet, west of Mt. Whitney. "None of the country shown, over which one must fly in crossing the Sierra Nevada Range at this point, is less than 11,000 feet in elevation. In a hollow among the summits is seen a sapphire jewel—a mountain-lake." Strange as it may seem—and who is there to deny it?—this vast group of mountain-summits conforms conspicuously and convincingly to the rules of pictorial composition. The rugged cliffs attended by the mountain-lake form the principal group of clearly defined objects. The balance is found in the precipitous peak at the extreme right, with peak after peak, and plane after plane, receding from the eye of the beholder in wonderful perspective. The topography and geological aspect of this vast region are displayed with marvelous and awe-inspiring realism. After a while, when wonderment shall have ceased, the observer may give a thought to the extraordinary photographic skill and physical courage of the aerial camerist, Lieutenant Stevens—the man who has produced these and many other equally remarkable and

successful aerial panoramas. All praise to him! No data available.

The extent to which the recent solar eclipse was photographed, successfully and otherwise, will never be known. Nevertheless, it may be assumed that the camerists who succeeded in making excellent pictures of the great spectacle, may be numbered among the thousands; for, intelligently observing certain rules for exposures that were published widely and in advance of the event, the average amateur was able to obtain successful exposures of at least several phases of the phenomenon. All the same, completely successful and technically perfect series of photographs, including the corona, were comparatively rare. PHOTO-ERA has received highly satisfactory sets from many of its subscribers. A few of these appear in this issue.

A remarkably fine set is by Mr. Fred Schmid, page 188, who states that he rigged up a wooden box. At one end he attached a 35-inch Goerz Artar lens and at the other end a little camera and shutter attachment enabling him to use either plates or film-packs $1\frac{5}{8} \times 2\frac{1}{2}$. He snapped a number of the phases of the partial eclipse through a dark-brown screen on film-packs, but two or three pictures just before, at, and after totality, were exposed on Gevaert filtered plates without screen. The totality picture he gave about three seconds with F/15 Artar 35-inch lens. Mr. Schmid made the exposures at New Rochelle out of his attic-window.

Another interesting set of eclipse-pictures was made by R. Gorbald, F. R. G. S., F. R. P. S., at New Haven, Conn. Page 189. The exposures were effected by means of an ordinary reflex camera fitted with an Adon telephoto. lens. The prints sent for reproduction were enlargements. The lack of sharpness of the one made during totality, Mr. Gorbald attributes to the fact that it was necessary to give an exposure of ten seconds in order to secure the corona. The others were exposed at $1/1000$ second. The plates used up to the time of totality were Wellington Anti-Screen, and during totality Wellington Spectrum, all of the plates being backed.

The pictures of corona and totality, page 190, were made by Lieut. Robert A. Cecchini, at Windsor, Conn.

Data: The light of the corona is very much more intense in a narrow line immediately around the rim of the moon; this forms a ring which is visible before the rest of the corona can be seen. The crescent is very thin and much shortened just before it disappears. Only a minute fraction of the sun's light comes from it. There is light enough, however, to drown out all of the corona except the thin circle of light which corresponds to the band of an engagement-ring. The tiny remainder of the crescent looks round, or nearly round, to the observer's naked eye.

Totality, made with 17-inch lens. F/16, 5 seconds. Corona, made with ditto, F/16, $\frac{1}{2}$ second.

The moment of totality is effectively pictured by T. W. Kilmer, Jr., on page 191. The maker calls his effort a photographic drawing, because the outer corona was put in with pencil as seen at the time through telescope. The eclipse and inner corona were photographed on roll-film with a $2\frac{1}{4} \times 2\frac{1}{4}$ Icarette camera

fitted with Carl Zeiss F/4.5 Tessar lens used at eye-piece of 2½-inch telescope. Exposure about ten seconds—"hands were so cold that I forgot to count."

Yes; it was an intensely cold day, February 24. I journeyed to Westerly, R. I., and saw the eclipse in all its glory—particularly the beautiful and awe-inspiring corona; but I nearly froze both hands and feet while enjoying the great spectacle.

The illustrations which accompany Mr. Hotchkiss' valuable article, pages 194 to 196, may not be works of art; but they are technically superb, and as beautiful to look at as the works of a costly Swiss watch. Besides, they tell the story quite eloquently; and the story is a good one.

Edward L. Harrison, master-architect, archæologist and photographic expert, reappears as author-camerist, and to excellent advantage. The illustrations which accompany the travelog of the average camerist are usually hastily-made snapshots, for which the author or the reviewer feels obliged to make excuses. However, that does not apply in the present instance; for Mr. Harrison is careful, methodical and painstaking in all that he undertakes. A glance at his group of camera-sketches, page 200, would seem to bear out this statement. Each of these reduced pictures will repay studious examination. His view of the Caribbean Sea, page 199, shows that our well-equipped friend has an eye for the picturesquely beautiful. Data are to be found in the text.

His familiarity with perpendiculars and horizontals proved valuable in making this marine, for his water-line is perfectly level!

Claude P. Fordyce evidently believes that his camera-illustrations should correspond in excellence with his slogan, "Getting Good Pictures", pages 202 to 205. So far as technically satisfactory results are concerned, they please the critical observer. His entry into the pictorial field, however, would seem to indicate a lesser degree of success. His "Moonlight-Effect"—the setting sun—is obviously unconvincing, but it must have been a glorious spectacle and fully warranted the camerist to make it his own. The horizon bisects the view, which, in this case, does not tend to good composition. To diminish either half—preferably the upper one—would improve the picture in that respect. To trim from all sides, however—in order to level the water-line—might spell disaster, and bring the present favorable position of the luminary and its reflection dangerously nearer to the right side of the enclosure.

Dan McCowan's illustrations, pages 211 to 214, show painstaking effort, particularly in the camping-scenes. There are not a few outdoor-workers who will sympathise with Mr. McCowan, when one of the horses—page 212—turned its head at the moment of exposure. Had our camerist-traveler found it convenient to use color-sensitive material, with or without filter, the tone-values of his portraits of Indian chiefs, in their multi-colored costumes, would have greater artistic and educational value.

Data: "GLORY OF PAINT AND FEATHERS"—July; 8 A.M.; bright; stop, F/8; 1/25 second. "TATANKA CINCA"—July; 9 A.M.; fairly bright; stop, F/8; 1/10 second. "TAH-OOSA"—July, 10 A.M.; sunny; stop, F/11; 1/25 second; enlarged from part of negative.

All of Mr. McCowan's above-mentioned pictures were made near Banff, Canadian Rockies. The camera used was an Eastman Folding Pocket Kodak, 3¼ x 4¼, fitted with a Cooke lens and Compound shutter. Exposures (presumably on roll-film) were tray-developed with M. Q.

In "Morning", page 216, we behold a delightful

example of decorative photography—an unusual marine. The use of a filter, here, might have done full justice to the water; but the artist was able to include the clouds and thus add to the pictorial interest of his morning-scene. Are you entirely satisfied with the present position of the water-line, Brother Adderley?

Data: August 8; hazy sunlight; 8½-inch Ilex Paragon lens; stop, F/4.5; 1/100 second; no filter; 4 x 5 Ortho plate; Eastman Portrait Bromide; Amidol.

Honorable Mention

No. 1, "Beckin Lums", group on page 222, suggests a type of domicile seen in Scotland; but the maker of the print did not give its location. It is capable of yielding an attractive picture with ivy seen hanging around the doors and windows, and a background of woods.

Data: July; 11 A.M.; bright sun; No. 4 Kodak; R. R. lens; stop F/8; 1/25 second; Kodak film; enlarged on Defender Buff Silk; redeveloped.

No. 2, "A Home on the Willamette", appears to be situated high on the banks of the Willamette River. This inviting home, with its attractive setting—trees, a flower-garden and a pretty wooden stairway leading to what may be the river—has been rendered with much artistic skill. The pictorial design rings true, and everything in it is well placed.

Data: Made near Portland, Ore.; bright light; 5 x 7 camera; 8½-inch Century Convertible lens; stop, 16; ½ second; Commercial Ortho Cut Film; enlarged on Etching Brown.

No. 3, "My Home", is more pretentious than any of this group. There is an air of artistic taste and refinement about the place, and the suggestion of a flourishing garden behind the tall, partly screened fence. The house is not shown in its entirety—probably with the intention of including the bushes at the right and more sky which, as may be seen, is filled with clouds. The artistic intent of the camerist is pleasingly obvious.

Data: Made at Litchfield, Conn.; August, 11 A.M.; bright light; 2¼ x 3¼ Graflex; 6½-inch Tessar Ic; stop, F/8; color-screen K2; 1/25 second; Commercial Panchromatic Cut Film; elon-pyro; enlarged on Wellington Chamois Bromide.

No. 4, "An Orchard Homestead", is charmingly rendered despite the somewhat rigid design. The soft quality of the print, gained legitimately, is very attractive and imparts a warm atmospheric appearance to the print that seems to be in keeping with the general character of the subject.

Data: Made near Bloomsburg, Pa.; August, 3 P.M. bright light; 9 x 12 cm. Ica camera; 13.5-cm. Heckla lens; stop, F/8; 10-time color-screen; ½ second; Eastman Portrait Film; Eastman Special Developer; enlarged on Eastman Portrait Bromide White Rough Lustre.

No. 5—last, but not least—"A Smoky Day", is similar to No. 4 in general arrangement, but is quite different in composition and treatment. Whatever is the precise character of the atmosphere, it certainly aided the artist to create a rare pictorial gem. The composition is as pleasing as it is unusual. The dark mass of rich leafage, at the right, is spontaneously balanced by a group of tall trees in the middle distance, at the left. The "smoky day" gave Mr. Onishi an opportunity that he utilised in an eminently successful manner.

Data: Made near Granite Falls, Washington; June 30, 1.15 P.M.; smoky; 3¼ x 4¼ Auto Graflex camera; Bausch & Lomb 8½-inch Ic Tessar; stop, F/8; 1/25 second; Eastman Film Pack; Glycin; print, Defender Velatex; elon-hydro.



ON THE GROUNDGLASS

WILFRED A. FRENCH



The Last of Personal Coincidences

ALTHOUGH I seem to have more than my share of unusual experiences, in the form of coincidences, I have concluded to spare PHOTO-ERA readers recitals of any more. Those that have appeared in recent issues should constitute a goodly allowance. Nevertheless, I beg to be permitted to relate the last of the series for reasons that will be appreciated even by those who, before this, may have cried, "No more; enough!"

The concluding feature of my trip to Florida, last February, was a water-trip on the beautiful St. John's River, Florida, from Sanford to Jacksonville—a repetition of a similar treat which I enjoyed in 1887. I passed such old acquaintances as Palatka, Green Cove Springs, Magnolia Springs and, farther on, but on the opposite shore of the river, Mandarin, the winter-home of Harriet Beecher Stowe, the well-known author of "Uncle Tom's Cabin". I recalled with pleasure the brief visit I paid the aged writer, and the successful photograph I made of her home, in 1887. The place happened to be the *last* point of interest of this present steamboat-ride.

Later, during the day, I amused myself solving a crossword puzzle, the *very last* definition of which—in the lower right corner—was, "Last name of author of Uncle Tom's Cabin"!

A Remarkable Scenic Resemblance

DURING my visit to Florida, last February, I was the guest, with Mrs. French, of Mr. Thomas L. Carpenter, at Crescent City. This growing, little town is prettily situated on the western shore of Lake Crescent. Mr. Carpenter, who is an accomplished photographic worker, will be remembered by readers of PHOTO-ERA as the author of "Florida Impressions", a beautifully illustrated article which appeared in the magazine in 1921. He owns a charming estate and several extensive orange-groves at Crescent City, where he spends the winter and spring looking after the harvesting and shipping of his golden fruit.

The chamber assigned to us overlooks the garden—which is filled with various native palms, fruit-trees, flowers and shrubs, including a tall and slender Italian cypress—and Lake Crescent, with a densely wooded island in the distance. This view, enhanced by trees and bushes in the immediate foreground, bears a striking resemblance to a vista which I beheld from my hotel-window at Menaggio, situated on the western shore of Lake Como, opposite Bellagio, when I visited that beautiful region some years ago. To enhance the impression is the knowledge that a few miles north from Crescent City is a small and beautiful sheet of water, called Lake Como!

The Editorial Habit

Friend—"Why didn't you retaliate when the fellow struck you?"

Editor—"I didn't know him, and it is our rule to pay no attention to anonymous contributions."

EXCHANGE.

When Punning is No Crime

EVERY lively camera club has its humorous moments. Even serious meetings are enlivened by occasional sallies of good-natured wit, and prints offered for criticism do not escape the eye and tongue of the ready humorist.

A new and youthful member of the Union Camera Club was reluctantly showing a very flattering portrait he had made of a young lady in whom he was supposed to be interested. T., puffing at his black pipe, bent forward, inspected the portrait briefly, and, removing his *vade mecum*, remarked dryly, "I should say that he's *idolised* her."

A Wish that May Be Gratified

AS I was sitting in the commodious lounge of the Cocoa House, at Cocoa, Florida, one day last February, I noticed that a middle-aged gentleman, who was sitting beside me, was examining a copy of PHOTO-ERA he had taken from the magazine-table. He seemed to take genuine pleasure in looking it over—not hastily, but deliberately, studiously.

After a while I remarked, "Pardon me Sir; but are you a camerist?" Slowly turning a page, he replied pleasantly, "No; but after studying this magazine, I wish I were."

An Impending Snapshot

OVERHEARD in bus speeding along the Indian River, Florida, in the pelican country.

Passenger (eagerly): "Driver! Is that a pelican sitting at the end of that pier over there?"

Driver: "No Sir; dat's one of dem 'ere camera-cranks."

The Fickle Hobby

OVERHEARD at the Union Camera Club, last month. A. (an enthusiastic pictorialist and booster for the camera-club): "We missed you at our winter-outing. Where were you?" B. (evasively): "Oh, I was busy installing a radio-set at my house."

A month later. A. "Say! You didn't show up at the last club-meeting. Listening in, I suppose. B. (embarrassed): "No, not exactly. I was working on a hard cross-word puzzle."

What next!

The Lure of Amateur Collecting

SHE was surprised in the act of appropriating a small silver dish in an art-store. She looked refined, but had succumbed to the habit of taking things, including photographs. In fact she was a kleptomaniac. "What made you take this?" asked the house-detective. Taking a slip of paper from her hand-bag, she handed it to the officer, sadly remarking: "I just couldn't resist the lure. A friend gave me the slip an hour ago urging me to read the book." It was the title of a well-known book, "The Art of Amateur Collecting".



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



How To Make a Condensed Form of a Small Developing-and-Fixing Tank

THE first thing is to go to the nearest battery station or motorcycle store and get an old worn-out motorcycle battery, which you should be able to procure for fifty or seventy-five cents.

Take it home, cut off the connectors on top of the battery with a hack-saw or pair of cutting-pliers. Get an old knife, heat it up and cut through the pitch just inside the battery-jar, around each cell. Then take a pair of pliers and pull each cell out separately. If you prefer, have a battery man take the cells out for you at a small charge.

A rag soaked in kerosene will remove the pitch that sticks to the top of the jar. Next, boil out the jar with a strong solution of sodium carbonate. Care must be taken that the jar does not get too hot or it may get out of shape.

Now you have a jar with three separate compartments. Take a knife or something sharp and scratch on the outside, at each end compartment, the letter "D" for Developing and the letter "H" for Hypo. The center compartment is used for a rinse.

Procure from a photographic store, a few film-clips such as are used for tank-development of film packs. These have a small hook on the end which you use to hang on the side of the battery-jar to suspend the film in the jar.

After you have completed the above directions, you will have one of the finest developing-and-fixing tanks you could desire for films up to $3\frac{1}{4} \times 4\frac{1}{4}$ size.

A few hints may not be out of order here.

Each cell in the jar holds about 10 to 12 oz. of water, according to the size of the battery.

For summer this tank is ideal. When developing in hot weather, fill up the center cell with cracked ice and add water to come to the top. This will keep the developer fairly cool. If you have no ice, fill it up with a fresh solution of plain hypo which will also keep it cool for a while.

I use an A.B.C. Developer and use one ounce each of A.B.C. in 7 ounces of water which fills up one cell, and develop for 8 to 12 minutes.

A cover can be made out of a cigar box so that it fits snugly over the top, leaving enough clearance for the film-clip. I just take a cover of an old candy-box, painted a flat black inside, which does as well.

HENRY T. SILL.

Direct Positives

A NUMBER of the modern printing-processes, such as pinotypy, require diapositives for the production of positive copies. The following method is recommended for producing a positive directly on the same plate by simple development instead of the primary negative: Expose in the usual way and as soon as the negative is sufficiently developed in the dark-room, the plate, completely covered with the developer, is exposed to full daylight. In a very short time the negative is changed to a positive, which is then washed and fixed.—*Camera (Zurich)*.

Harmonising Hard Negatives

A CORRESPONDENT of *La Photo. pour Tous* recommends a method worked out by Prof. M. R. Namias to remedy the peculiar action of persulphate on negatives developed with certain developers, having often used it with good results. The method consists in transforming the silver-bromide or chloride image and redeveloping only its superficial portions. In fixing the subjacent undeveloped white image, the opacity of the denser parts is reduced. By this method the work is done in reverse order, transforming the superficial layers by the action of a very dilute solution of bichloride of mercury in acid permanganate, into a mixture of chloride of silver and bichloride of mercury and retransforming the white portions into metallic silver by an ordinary developer. The negative is immersed in a bath containing 2 per cent. of mercury bichloride and 5 per cent. of sodium chloride. The bleaching begins at the surface and the negative is removed when the deep blacks, examined from the glass-side, are still black and have not begun to turn gray. After washing, the negative is placed in a 4 per cent. solution of potassium permanganate and 1 per cent. of sulphuric acid which dissolves the black silver while the whites remain almost intact. The negative is then decolorized in a 2-per-cent. solution of sodium bisulphite, which dissolves the manganese dioxide which has formed. The negative now presents a white image which is developed in an ordinary developer. Wash without fixing.

Supersensitising Photo-Emulsions by Preliminary Exposure to Blue-Green Light

ACCORDING to Dr. Neugebauer, the sensitiveness of plates and films may be considerably increased by subjecting them to a preliminary exposure to blue-green light. By doing this the sensitometric curve undergoes a considerable improvement in the direction that its inclination becomes less pronounced in the region of 500 to 520. The employment of blue-green possesses besides the advantage of not striking any maximum point of the sensitometric line when ordinary or orthochromatic plates are used, and thus reducing the danger of fog. It is possible that this method may also be employed with panchromatic emulsions. This operation increases considerably the general sensitiveness. With a preliminary exposure of two to three seconds they have succeeded in increasing 6.4 times the sensitiveness of some plates without causing more than a very slight fog. The result of the experiment has been particularly good with films to make Kinematographic views. If an extreme rendition of details is not sought for in the shadows, the normal time of exposure can be reduced one-half and even to one-third. These preliminary exposures have been made with a lamp of ten candle-power, furnished with a screen allowing only the rays from 480 to 510 to pass, and that at a distance of 75 centimeters. These screens are, of course, of special composition.—*Post Tenebras Lux*.



THE STEREOPHOTOGRAPHER



Viewing Stereo-Positives and Prints

STEREOSCOPIC photography is one branch of the great art which never loses its appeal. The converts to this method are constant; but they remain isolated except in those few cases where we have clubs formed of stereoscopic enthusiasts. Perhaps one reason is that the usual photographer can publish his work in periodicals and thus let others enjoy that which has given him so much pleasure in creating.

Any of the more ordinary methods of photo-reproduction are unsatisfactory to make stereoscopic views; for in the enlargement, incident to viewing these reproductions, the screen, grain or other mechanical features become obtrusive. The question which now confronts us is that of the method whereby stereoscopic views may be published satisfactorily. The answer lies, not with the publisher but with the reader.

Let us consider the laws which make stereoscopic photography possible. The eyes are separated in the head, so that when any object is seen in nature each eye receives a slightly different impression. The left eye sees more of the left side of objects and the right sees a little more of the right side. If we could see only those portions visible to both eyes, we should not have true stereoscopic vision, but could judge depth only by virtue of habit and of atmospheric depth. Thus we see that the stereoscopic effect is due to those portions of each object which are seen by but one eye.

It is evident that if we make two photographs from points slightly separated, we shall obtain two pictures which will be analogous to the impressions received by the two eyes; but as a photographic lens inverts the image in both vertical and horizontal directions, the negatives must be turned right side up and transposed; that is, the left side is placed on the right and vice versa. The negative may be cut or, as is more usual, a print is made and when dry it is cut in two, then transposed in mounting. The later method is to use a special printing-frame which allows transposition to be performed without cutting either paper or negative.

However, a double print is made which reproduces the impressions received by the two eyes. Now if we can display these two pictures to the eyes, so that each eye shall see but its own picture, we shall obtain the stereoscopic effect. The familiar stereoscope was designed to do this, and it is successful. By prisms and lenses it presents each picture to the corresponding eye; and, in the case of the smaller pictures, the prism is rendered unnecessary as the distance from center to center of the pictures does not exceed the normal inter-pupillary distance.

The stereoscope often proves to be a strain upon the eyes, and is objectionable in other ways. I do not hesitate to say that the fancied necessity to use this instrument was a potent factor in holding stereoscopic photography down. The fact is that the stereoscope is absolutely unnecessary in viewing stereoscopic views.

We know that the focus of the eye is changed when we look at a distant object then at a close one. At the same time, the eyes turn inward toward each other when looking at a near object. Lifelong habit has made these two motions one; but there is no reason that the two sets of muscles which produce these

motions should not be trained to act separately. If I may use an example which is rather inelegant, try to rub your chest and pat your head at the same time. If you have never tried to do this you will find that both hands want to rub or pat at the same time; yet, there is no anatomical reason that the analogous muscles should not act independently.

Our stereoscopic view consists of two pictures which in the 4.5 x 10.7 mm. and 6 x 13 cm. sizes have a center to center distance equivalent to the normal inter-pupillary distance. These two pictures represent the scene seen by the two eyes respectively. Now, it is evident that if the eyes be trained upon the horizon which will give practically parallel axes, and that if then the stereo-view is placed before the eyes and the focus of the eye changed without allowing the eyeball to rotate in its orbit, each eye will see its corresponding view and the result will be stereoscopic vision without the aid of the stereoscope. At first, it will be found most difficult to do this; but the little device I shall describe here will prove a great help.

Obtain two pieces of mailing-tube about six inches long. Have someone measure your inter-pupillary distance and fix these two tubes side by side in such a manner that their inter-center distance is the same as your inter-pupillary distance. Then make a rather thin 4.5 x 10.7 mm. positive with transparent shadows.

Go outdoors where you will have an uninterrupted view of the horizon or other distant point. Look through the mailing-tube device, and look through a transparent highlight in the positive at this distant point. You will then see in the center of vision *one* image of the positive; but it will be blurred. Now relax the eyes; but if this image shows evidence of becoming two images, focus again upon the distant point. Soon, you will find that you will see the positive held at arms length in pure stereoscopic relief. You are merely training the eyes to focus at a short distance without converging. Soon you will be able to accomplish this with the view held at comfortable reading-distance. Then comes the great surprise. When you have trained the eyes to see stereoscopic views without the aid of dark chambers or lenses and at a reading-distance, you will suddenly discover, some day, that you can see them without the aid of the mailing-tube device. Thus it is evident that you will become enabled to see ordinary halftone-reproductions of stereo-views in the true stereoscopic manner, and you will soon be able to do this instantly, at will, without causing more interruption in your reading than any usual single view would occasion.

There is but one further point to bring out which would make photo-reproduction of these views very satisfactory. If an ordinary paper-print is made of a 4.5 x 10.7 mm. negative, and this is then transposed and mounted *without any space between the halves*, the exercises herein described will become far easier, for such procedure will allow a slight convergence in the eyes which is not nearly so trying as a strict parallelism.

Do not try this exercise for more than a minute or two the first day, two or three the second and not for more than five minutes at any time during the first week, as the strain upon the eye-muscles will cause discomfort; but after two or three weeks the eyes will

instantly accommodate themselves to stereo-views without discomfort. You must remember that any unaccustomed exercise causes fatigue and soreness at first.

I should like each of you who try this successfully to write to Mr. Beardsley; and, if the response is sufficient, I would suggest that each month PHOTO-ERA MAGAZINE carry at least one 4.5 x 9 stereo-pair, that is the two halves of a 4.5 x 10.7 mounted without any space, and reproduced as other photographs are reproduced.

HERBERT C. MCKAY.

Contrast in Stereo-Negatives

THE old rule to expose for the shadows and let the highlights take care of themselves, will hold good in stereophotography, as in ordinary work. It has sometimes been advocated by stereo-workers to reverse this axiom, in order to avoid excessive contrast in the sky or lighter portions of the negative.

However, this suggestion is but begging the question. The best way to avoid such excessive contrast is by use of soft-working emulsion for negative-making, developing with a formula that tends to give soft results and, in case of paper-prints, to use soft paper.

The stereo must be soft, with long scale of gradation, to be entirely satisfactory. Contrasty prints hurt the eye, literally. Use of such a plate as Seed 30, or Portrait film, developed in either of the following developers, will give a negative with all the detail and with that softness usually found only in portraiture. The developers are standard Amidol and M.-Q.-Borax formulæ, as follows:

| | |
|---------------------------|--------|
| Sodium Sulphite, dry..... | 90 gr. |
| Amidol..... | 15 gr. |
| Water..... | 7 oz. |
| or | |
| Hot water (112°)..... | 5 oz. |
| Elon..... | 7 gr. |
| Hydroquinon..... | 7 gr. |
| Sodium Sulphite, dry..... | 35 gr. |
| Borax, powdered..... | 70 gr. |
| Water to make..... | 7 oz. |

Both developers should be used at 65 to 70 degrees and will develop portrait-film, film-pack, or Seed 30 plate in 4½ minutes at the lower temperature and 3 to 3¾ minutes at the higher temperature. The usual developer recommended by any plate-maker, if it is diluted and the amount of alkali diminished, will work more softly; but the above are standard developers that give excellent results.

One other way to avoid this excessive contrast is by employment of well-corrected orthochromatic, or even panchromatic, plates or cut films, and the use of a light, yellow filter such as K-1. A dark or orange-colored filter will over-correct the sky-tones and give false values. The lighter filter will give a truthful rendering of those tones, and, at the same time, will improve the monochrome effect of the foreground.

To sum up the matter, let me repeat, expose fully; but do not give excessive overexposure thereby ensuring muddy, flat negative. Use of a good exposure-meter will make this a matter of certainty. Then use a soft-working developer and do not over-develop, but be content with a negative which shows maximum detail and sufficient density in the highlights to avoid flatness. After all, only experience will teach one what to work for; but it is the hope that such notes extracted from experience of others may make the road shorter and smoother.

CHARLES FRANCIS HAMILTON.

Photography Aids Airplane-Mapping

Two new instruments, a magnifying stereoscope and a camera lucida, have been designed and built by the Bureau of Standards, Department of Commerce, as aids to map-making by means of airplane-photography.

The stereoscope, built for the Coast and Geodetic Survey, is to be used in picking out triangulation stations when airplane-photographs are used to supply details for a map based primarily on a ground survey. Such stations are generally flag-staffs, church-steeple, and other high objects, which are very prominent when viewed from the ground but are often hard to locate in the photographs.

The stereoscope makes high objects stand up in a very conspicuous manner. Bushes look as tall as poplars and curbs like garden walls. No difficulty is found in locating the desired landmarks. This exaggerated effect is obtained by using two photographs under the stereoscope, these often having been made several miles apart. The instrument is so arranged that the overlapping portions of these two can be brought together to the eyes. It also has lenses capable of magnifying the photographs by from 3.5 to 9.5 diameters.

The camera lucida is used to transfer points to the map in cases where a line-map is to be made and not a photograph. It is especially designed to correct for the variations in scale and for the distortion due to roll and pitch of the plane which are unavoidable in airplane-photography. The photograph, horizontalised and brought to the proper scale, is projected upon the map and the desired points and lines are traced in with a pencil.



Preserving Photographic Plates

In reply to a question as to the best means to preserve unused photo-plates and how to treat very old ones, *Il Corriere Fotografico* writes as follows: With the same degree of sensitiveness, those plates keep best whose emulsions give the greatest contrast effects in the prints. The most sensitive plates are the least durable, and it has been observed that they fog more strongly and thus lose much of their sensitiveness. Orthochromatic plates, used with or without yellow filter, do not appear to be inferior to other kinds in point of preservation. In regard to old plates, the best way to utilise them is as diapositives. A. Masson, who has studied hundreds of boxes of old plates of various kinds and makes, has arrived at the following conclusion: "With such plates the exposure should be extended as much as practicable. Before developing, immerse them for some time in clean water. Do not use a rapid developer, or one that tends to discolor quickly, nor be sparing of it. The developer that gives the best results is slow acid diamidophenol, although it does not suit all makes of plates, especially English. Slow iconogen, however, is good when sufficiently bromised. Developers that contain no sulphite are recommended, but they should include some other substance to ensure preservation. Theoretically, clarifying and retarding substances which introduce sulphuric acid in developers could be used to advantage. In any case, developers that give very clear negatives or diapositives are indicated for old plates, with as much bromide as may be necessary to bring out details in the shadows. If fog begins to show in the margins of the plate, development should be suspended at once and the plate well washed before fixing in a new and strongly acid bath."



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY



The Amateur Kinematographer

THERE seems to persist an idea among amateurs that the sixteen-millimeter gauge film and the cameras which use it are toys. This is a most erroneous idea and one which I hope you will discard if you now have it. These instruments are very carefully made and are capable of producing work which is in every way comparable to that produced by professional instruments. In fact, the amateur will produce film which will appear to better advantage upon the screen, made with one of these cameras, than he would by employing a professional camera.

Many of us remember the days when the amateur photographer started out carrying an eight by ten outfit with a half-dozen plateholders filled with glass. In those good old days a man must have had the physique of a blacksmith to enjoy photography. Then the Kodak came into being, ushering in the era of small, portable cameras; but for years this was but a make-shift. It is only in recent years that the small pocket-camera with all adjustments and fine lenses has become popular. There are still a number of large camera advocates, but most serious work is done with cameras four by five or smaller. And I am sure that with a tiny pocket-camera costing as much as two or three suits of clothing, no photographer regards these instruments as toys.

Just as the pocket-camera had to have the various adjustments incorporated into it before it received recognition, so the sixteen-millimeter camera could not receive commercial recognition so long as it was not flexible. In this regard, I read recently with great pleasure a catalog of accessories for the Filmo camera which I received from Bell & Howell, the manufacturers.

As you undoubtedly know, the Filmo camera is a fool-proof camera, fixed focus, and no crank or tripod is required. This makes it an ideal camera for the beginner in kinematography; but it is sadly lacking for work of a commercial nature. The manufacturers recognised this and have produced these accessories. The first and most needed addition is a focusing-jacket for the lens which costs but a few dollars. Also the motors supplied for the camera vary. One is supplied which gives uniform exposures at any rate from eight to sixteen pictures a second. This is from one-half normal to normal and is the motor supplied in standard equipment. If desired, a motor can be supplied at a slight additional cost which operates at any desired speed from normal to twice normal and is useful in slowing down subjects which are too speedy. The manufacturers have also added a super-speed model which makes one hundred twenty-eight exposures per second or eight times normal. This will make beautiful slow-motion studies and motion-analysis film. This great speed requires the greatest available lens-aperture, so a lens is supplied which has a maximum opening of $F/2.7$.

No camera is really flexible until various lenses can be used with one instrument. The Filmo camera is now supplied with extra lenses for various kinds of work. These include 25 m/m, $F/2.7$; 25 m/m, $F/3$; 35 m/m, $F/3.5$; $3\frac{1}{2}$ -inch, $F/4.8$; 4-inch, $F/4$; and a 6-inch, $F/4.5$. The six-inch lens is six times the focus of the

normal lens and is good for extreme telephotography. Finally, the camera is fitted for use on a tripod if desired and a title-board with removable celluloid letters is supplied. Thus with the focusing-jacket, a 25 m/m lens, a $3\frac{1}{2}$ -inch and a 6-inch lens, tripod and title-board, the Filmo becomes a true commercial camera. In fact, many commercial kinematographers are using this camera now, for film can be supplied to the consumer at far less cost. This will tend to popularise the commercial uses of the sub-standard camera. Mr. Karl Barleben of Boston has advised me that he obtained a picture of the Prince of Wales only because he had the small camera without a tripod which he carried with him. The course of the drive of the Myopia Hunt was changed and the regular kinematographers with their heavy equipment lost out entirely.

When working in the summer sun in the South, or in the coming summer-months, remember that film is sensitive to heat and if the camera is left in the sun the film may curl or "buckle" and refuse to ride through the gate. This not only causes film-waste, but is likely to strain the delicate mechanism of the shuttle.

The choice of a sub-standard camera will widen in scope. The Duplex Company, who have long enjoyed an enviable reputation as manufacturers of motion-picture machinery, are preparing to place a sub-standard camera on the market, and the Wilart Cinema Company have suspended the manufacture of the professional model with the intention of devoting their entire time to the manufacture of a sub-standard camera. It may be news to some of you that several years ago this company produced the Actograph, a miniature camera which only failed to win popular approval because the film-supply was not assured and because the old procedure of development, printing and development was followed instead of the reversal system.

It has been rumored, but so far I have been unable to confirm the rumor, that two German and one French sub-standard camera will be on the market soon. It is possible that this may mean some novelties and refinements in construction; but my personal opinion is that our present American cameras will be very hard to beat.

Mr. Barleben of Boston suggests a national kinematographer's club, slightly along the lines of the professional society; but to be formed purely for the interchange of ideas and information between amateurs. This is entirely in accord with my own opinion. I believe that an established organisation would be more productive of vital results than the tenuous bond which exists between all of us at present as readers of this department. I should favor a slight fee and an interchange of films. I wish to have your opinion upon this subject. If you are not too busy, just sit down now and write to me about it. Are you for a club or society? Do you favor an annual fee? If so, how much? Do you favor an emblem or other mark of identification so that enthusiasts may recognise each other? What other ideas have you upon the subject? [Turn the page and read the interesting experience of Mr. Barleben when he photographed the Prince of Wales with one of the 16 mm. Bell & Howell cameras. Let us have more items like it—EDITOR.]

"How We Shot the Prince of Wales."

OCTOBER 18 and 23, 1924, were busy days for us. On the first we were to shoot the Myopia Hunt Race, and on the second we were commissioned to get pictures of the Prince of Wales, during his visit at the Tuckerman estate, Hamilton, Mass. We were four in number, with the following equipment: One Akeley camera with slow-motion attachment; F/1.9, two-inch; F/3.5, two-inch; a six, and a twelve-inch telephoto-lens outfit; a Universal; and a baby Bell & Howell 16 mm. camera.

Our starting-place was Salem, Mass. From there we went via auto with our outfits to the race-course. Special stands had been built for us ahead of time; for the Myopia Hunt Race is the event of the hunting-season in Eastern Massachusetts. Each man was given explicit directions and we parted, the fourth man going along with the Akeley unit on account of the telephoto and slow-motion attachments. I was placed on a stand some distance from the finish line, but right near a water-ditch and a hurdle. Some distance ahead of me was a brush-covered hill through which the riders were to go. I was to get a "long shot" of the riders for atmosphere as they went over the hill through the brush; then, as they swung down the hill, they were to pass me and I was to get them going over the ditch and hurdle. My companions were to get close-ups of winners, crowds, and other interesting happenings.

Everything went off as planned. I got some great stuff, and it would have been a perfect day had I not missed a spill, off to one side of me. I was shooting the racers, as they came over the hurdle towards me, then I swung the camera around to get them going away from me. It was while my camera was in the latter position that the last man over stumbled and had a nasty fall. This fall would have made great picture-stuff; but I missed it, and haven't quite gotten over the disappointment yet. Anyway the Akeley man missed a fall himself, so I felt a bit better when he told me. Between us we shot about 1500 feet of film.

Moral: Keep shooting until the last man is over and past!

October 23 was a typical Fall day. We were glad, for we were to shoot the Prince of Wales that day. Only three of us went on that trip. When we reached Hamilton, we split up in two cars. This time I took my Universal and the baby Bell & Howell and a Graflex. I well needed an assistant, so the third man went with me. While the Akeley man went to the house to steal shots of the dinner-party with his 12-inch telephoto lens, my assistant and myself took the other car and went to the course over which the Prince was to ride in the drag-hound that was to follow. We no sooner got well within the gates than two motorcycles appeared. A closer look and we discovered that they were State Policemen. This was not so good, for we were set on getting His Royal Highness. So, quickly into the brush we ran and dumped all our stuff on the ground; my partner leaving said stuff and me there and riding off down the other side of the slope out of sight. This was about one o'clock. I lay in the brush watching the police patrol the grounds and several times they came very close to me. Each time I thought to myself—"Well, no pictures today!"; but as I had taken the precaution to wrap my leather-coat around the shiny Universal—which is all polished aluminum—they didn't discover my hiding-place.

Two o'clock came and went without incident. There was only the droning of the motorcycles to break the stillness. Three o'clock came and I began to think

I was deserted. Finally, several people came in with cars and parked them, and soon after the police went away. Not until then did I breathe easily. It wasn't long after that until I saw the Akeley man in the Lincoln speeding toward me, and he rushed me out to a spot where I could get a shot of the Prince. Well, as it is in this business, you are either loafing or you're darned busy. I was the latter. While the Akeley man was making slow-motion stuff, I was grinding at normal speed, and between the Universal, the baby Bell & Howell and the Graflex, I had my hands full.

No sooner had the Prince passed from our vision than we were hustled into the car and taken at break-neck speed to a further point where we could again get a shot at the Prince. The Universal magazines were empty, and no time to reload, so the boys dropped me at the brow of the hill with nothing but the 16 mm. Bell & Howell, and sped on to a point of vantage beyond me.

Now the following incident will please all 16 mm. fans. I had the camera strap around my neck, and the camera wound up. Here and there I was getting a few crowd-shots for atmosphere. Nearby there was another cameraman with a Universal all set up, though I didn't give him a thought until afterwards. Suddenly the crowds began to shout, and in the distance came the hounds, followed by the riders. I made doubly sure that everything was O.K. with the camera, as I was getting a bit shaky and my experience with that model was not great. And to make matters worse, it was growing dark. Unexpectedly the chase stopped at the further side of the hill. "They have lost the scent!" I heard several people exclaim. So I rushed down to where they were circling around, saying to myself, "Now I can get some shots of the Prince while he is at ease!" You may be sure that I lost no time in getting close and shooting. I secured many feet of close-ups of the Prince, being not farther than ten or twelve feet away from him. Finally, they recovered the scent, and away they went, with me still pressing the old button until the motor died.

But here's the joke! As they left, instead of going the way they had planned, around the hill and past my former position, they cut almost directly away from that spot. It was then that I again thought of the chap with his Universal all set up. He didn't get one inch of film. Nor would I have, nor anybody else, had I tried to use my Universal or the Akeley. That situation demanded quick thinking and a light hand-camera, and motor-drive. So I give credit to the little B. & H. for my success on that job.

I was picked up later in the jam of autos and people and we went to the studio in Salem. It was dark by that time and near supper-time, so we went into a restaurant to eat and exchange experiences of the day. After supper we developed our stuff on a Steineman outfit, and were well pleased with the results. Prints followed the next day. The film is now the property of the Myopia Hunt Club.

KARL A. BARLEBEN, JR.



Photographs of Eclipse at 17,000 feet

MASTER SERGEANT D. D. JOHNSON: Air Service Tactical School Detachment, Langley Field, Va., with Staff Sergeant H. G. Merson, 20th Photo-Section as photographer, piloted a DH4-B airplane on the morning of January 24 to a height of 17,000 feet for the purpose of making pictures of the eclipse of the sun. They succeeded in getting some very good pictures in spite of the severe cold they had to endure.



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL—ORC.



Air Service Obtains Fine Eclipse-Pictures

SCIENTISTS engaged in the work of gathering astronomical data in collaboration with the Army Air Service at the time of the recent eclipse of the sun, declared that the results obtained ranked with the best ever achieved in this form of investigation. Photographs of the eclipse from army airplanes, flown at high altitudes, were made in different sections of the United States. This work, however, was done on the largest scale at Mitchel Field, L.I., New York, where Dr. David Todd was in general charge of operations. Our Mitchel Field Correspondent describes in the following manner the participation of the Army Air Service in this scientific endeavor:

"The ancient science of Astronomy collaborated with one of the newest, aeronautics, in adding to the sum total of the accumulated wisdom of the ages." This was the consensus of opinion as to the part the Army Air Service played in observing and photographing the eclipse of the sun from Mitchel Field on January 24.

Dr. David Todd, Professor Emeritus of Astronomy at Amherst University and a venerable and distinguished scientist, outlined the data to be obtained, and his presence and efforts placed the observations on a truly scientific basis. In this he was assisted by Mr. William W. Hosp. Another prominent astronomer who made his headquarters at Mitchel Field was Dr. W. J. Luyten of Harvard University.

The morning of January 24 was bitterly cold with high north winds blowing. Activity on the flying line began at five-thirty, and by seven it was evident that the limited facilities for heating oil and water would not permit the entire thirty-five planes to get off the ground in time to carry out their respective missions. The schedule was quickly revised and the ten least important missions eliminated. The last of the remaining twenty-five planes cleared the field a little after eight.

To avoid congestion and the possibility of collision, the 1st Observation Squadron was assigned a point over Danbury, Connecticut; the 5th Squadron over Greenport, Long Island, and the 61st Service Squadron was to operate between upper Manhattan and Poughkeepsie. As a further safeguard during the period of totality all pilots were required to use their flashlights.

Working under instructions from Dr. Todd, Lieut. G. W. Goddard was detailed to obtain pictures of the shadow-bands of the Moon and Dr. S. M. Burka's mission called for pictures of the Sun's Corona. From sixteen thousand feet over Newburgh, New York, Lieut. Goddard, piloted by Lieut. G. C. McDonald, made a picture which will be of interest to science for many years to come. It was made just before totality, and shows the shadows of the moon one hundred miles in diameter with the shadow-bands on its arriving edge and beyond, the reflection of the sun, reduced to a small crescent, in the waters of Long Island Sound. Far in the distance can be seen the bright horizon in the unaffected area. On landing, Lieutenants Goddard and McDonald described the scene minutely to the assembled astronomers and reporters and in two hours the 14th Photo-Section had developed the negative and

made a large number of prints. The picture verified their description on every point.

Dr. S. M. Burka and his pilot, Lieut. C. E. Crumrine, suffered a setback before leaving the ground. Dr. Burka was to operate the fifty-inch focal-length camera from McCook Field, and special brackets had been built on the D-H he was to use. In making the final adjustment of this monster camera, the oil in the motor of their plane congealed. There was no time to change to warm oil, so the camera was quickly transferred to another plane and with only a make-shift arrangement to hold the camera in position they took off. From over Greenport, Long Island, they photographed the Sun's Corona and their pictures will also be the subject of scientific discussion.

Including the pictures made from the ground by the Eighth and Fourteenth Photo-Sections, about one hundred views showing various phases of the eclipse and the moon's shadow and shadow-bands were obtained. In addition to this, much scientific data was recorded. All persons connected with the observations were assembled in Post Headquarters at noon and Doctors Todd and Luyten made copious notes from the individual reports.

Anticipating the possibility of clouds, which would have obscured the view of the millions who were watching the eclipse in the vicinity of New York from the ground, a description of the eclipse was broadcast from a radio-equipped plane. While the cloudless sky detracted from the value of this, it served one practical purpose. At The Lighthouse, an institution for the blind of New York City, sightless men and women listened to a voice over the radio which told of an earth suddenly darkened and of a majestic spectacle the only knowledge of which came from the lips of others. This one audience well repaid the Air Service for the effort.

Selfridge Pilots Photograph Eclipse

THE First Pursuit Group at Selfridge Field, Mt. Clemens, Mich., played a very important part in the photographing of the eclipse of the sun on January 24 for Detroit papers. Two DeHavillands, one piloted by Lieut. Johnson, with Mr. H. V. Wilcox of the reportorial staff of the *Detroit News* as passenger, and the other by Lieut. Rich, with William A. Kuenzel, staff photographer of the same newspaper as passenger, were used as the mediums to obtain permanent views of this phenomenon. Atop a cloud bank 19,000 feet above Lake Huron, the total eclipse of the sun was viewed and photographed.

From a seat some four miles above the mist-hidden waters of Lake Huron, the airmen saw a hurricane of shadow sweep from the west at the rate of two hundred miles an hour and the sky suddenly became a majestic velvet dome of deep blue, in which myriads of stars twinkled with cheerful radiance. During the minute and a half of total eclipse, it was not totally dark above the clouds. The universe seemed blue rather than black, clouds could be traced and the planes were visible to each other because of the flame darting from their thundering exhausts. During these same ninety

seconds of the total eclipse, the planes had become drenched with dew. On the return trip to Selfridge Field, as the pilots plunged downward into the clouds, this moisture froze and partially clogged the controls with ice, and it was only by exerting their utmost strength that they were able to guide their ships back safely.

After two hours of frozen solitude, part of which time one was seldom conscious of the roar of the motor, land was again sighted and the pilots found themselves, due to irresistible winds of terrific velocity, sweeping in contrary directions and different altitudes, over a point in Canada north of Georgian Bay.

Gasoline was running low and there were approximately seventy-five miles to be flown to reach Selfridge Field. The home-stretch became a desperate race to avoid forced landings in the deep snow and uncharted wilds of Ontario. Lieutenant Rich, more fortunate than his brother officer, won his race by a breathless margin, while Lieutenant Johnson was forced down near Cam-lachie. Here he was given swift and generous help by the farmers, who supplied him with all gasoline available, about twenty gallons, which allowed him to glide to safety at Selfridge just as the last drops trickled into the good old Liberty motor.

A Unit of the Photo-Scouts

An outfit of the Signal Intelligence attached to the Division Headquarters consisting of one Captain, two 1st Lieutenants, one 2d Lieutenant (Property and Personnel Officer), three Master Sergeants (one as first Sergeant and two as Chief of Section). Note, this Unit divides in two sections, one for each Brigade Headquarters when in the field. Twelve Technical Sergeants, three Staff Sergeants, three Sergeants, twelve Corporals and ten Privates First Class (Specialists and Laboratory), two Privates (Specialist Cooks), twelve Privates.

The twelve Technical Sergeants and twelve Corporals are the Photo-Scouts, so that each active Infantry Battalion may have two Scouts attached. The three Staff Sergeants divide, one at outfit Headquarters, one in each Laboratory, five Privates with each section, One Private (Cook) with each section.

As to the equipment, there should be three dark-rooms (portable) each to have a developing-room, an enlarging-room and printing-room, equipped with projection-printer, capable of handling $3\frac{1}{4} \times 4\frac{1}{4}$ negatives to 8×10 , also printers-of small size. Special drying-equipment, etc.

There should be enough $3\frac{1}{4} \times 4\frac{1}{4}$ Reflex Cameras, of a folding type to give each Scout an outfit, with necessary replacements; and such other outfit as would suggest itself, from time to time during the building of a service of this type.

LESTER E. HIGGINS, Technical-Sergeant,
Q.M.C. 97th Div. ERC.

Air Service Reserve Activities in Southern California

CONSIDERABLE interest is being shown in the new Air Service Reserve Squadron, to be known as the 476th Pursuit Squadron, which is in process of organization at Clover Field, Santa Monica, Calif. Lieut. H. S. Kenyon, Jr., Air Service, who is in command of Clover Field, states that a full complement of officers for that squadron is almost attained and that in a short while competitive sports and flying-contests, open to the public, will be staged between the new 476th Pursuit Squadron and the 478th Pursuit Squadron, also a reserve squadron at Clover Field.

The 478th Pursuit Squadron enjoys an enviable record in Air Service Reserve circles in that it won a miniature airplane trophy while in summer training last year at Rockwell Field, San Diego, competing in a hotly contested fight with three other 9th Corps Area reserve squadrons. Captain William A. Frye, A.S. (Reserve) commands the 478th and Capt. Peyton Gibson, A.S. (Reserve) the 476th.

Clover Field was the recipient of a completely equipped machine shop, including a drill-press, several lathes and a full complement of airplane repair-tools. The equipment, which is new, is valued at many thousands of dollars and will enable the commanding officer to carry on on a more efficient basis than heretofore.

Regular training for reserve officers at Clover Field is entirely voluntary on their part, and from time to time is entered into enthusiastically by approximately one hundred Reserve Officers in the vicinity.

The Citizens' Military Training Camps

It is not too early for Regular Army, National Guard and Reserve Officers to work together so that the general public may be fully informed with regard to the value of the Citizens' Military Training Camps to the young manhood of our country. Contrary to the belief in some quarters, to sign up for one of these camps places the boy under no obligation to serve in the army. He is not enlisting. He is merely agreeing to abide by the rules of the Citizens' Military Training Camp and to conduct himself as a gentleman and a good citizen. This is no more than any well-organised private summer-camp requires. Then again, some people have the idea that the boys are filled with militarism and are taught to become eager for war. The facts give the lie to any such assumption. The actual military training or drill takes less time in the daily schedule than do sports, lectures on citizenship and recreation. In short, the boys are given just enough military discipline and drill to make them stand erect, look one squarely in the eye and honor the American flag.

It is with considerable satisfaction that I have noted the large number of boys who have signed up again for this year. They did so before the recruiting campaign was even announced. I happen to be local chairman for the town of Wolfeboro, New Hampshire, and at this writing our quota is already filled. However, we are not satisfied, but are continuing our efforts to make the fathers and mothers of our community understand that the Citizens' Military Training Camps will work with and for the boy to make him what he should be—an erect, clear-eyed, obedient, thinking young man who has learned what it means to be an American Citizen.

A Helpful Conversational Guide

AMONG the many camerists who contemplate a European journey, will be some who are not familiar with any of the continental languages. For their special benefit has been issued, by Marlborough & Co., the *Traveler's Practical Manual*, consisting of 144 pages of easy phrases in English, French, German, and Italian on important topics, such as the tourist is apt to use. This handy, little book further contains the latest suggestions regarding customs, fees, photography, motoring, baggage, trains, correspondence, weights and measures, European currency; also rules of pronunciation of French, German and Italian. It is the best book of the kind that has come to our notice. The price is \$1.00 and it can be obtained from E. Steiger, 49 Murray Street, New York, N.Y.



LONDON LETTER

CARINE AND WILL CADBY



LAST week a daily paper published photographs of five beautiful English women of today: the Countess of Carnarvon, the Hon. Mrs. Lionel Tenyson, Mrs. Danzil Cope, Lady Loughborough and the Marquise de Casa Maury. These types were shown to prove the truth of Mr. Walter Stoneman's theory that women are becoming more and more alike in their features. To be sure, at first sight, we are struck with a certain similarity of contour of face and features; but then they are all photographed full face, with exactly the same lighting and the same retouching, leaving the mouth isolated and accentuated. In short, they are the work of the same photographer. The flat lighting only slightly suggests the modeling of the face, and when we come to compare them, it is simply the eyes, set rather far apart, that are alike, and at all bear out the suggestion. Mr. Stoneman is no doubt quite right in his statement that the photographs of the women of today are alike; but with the obvious and immense variety of features we see all around us we should be more inclined to ascribe this peculiarity to the photographers rather than to the sitters. A pose, even an expression, becomes a fashion and is quickly stereotyped and does duty in a great number of pictures.

Mr. Walter Stoneman is a photographer who has been entrusted by the National Portrait Gallery with the important work of collecting photographic portraits of present-day men of mark and distinction. At present he does most of the photographs himself, and there is no doubt that he is an excellent photographer (the press has given him a good deal of publicity of late); but it seems to us that this collection would greatly gain in value if it were not the work of only one man. These women's portraits, which he has criticised, go to prove how the work of one individual tends to make sitters look alike, and as this collecting of records of important people is a national scheme of great interest, it should command the talent of the best men in the country.

Mr. Ward Muir, who is at present at Davos, in Switzerland, writes us that the sunshine there has been all that the photographer can desire; but there is still need of more snow, even from the point of view of the camera. But the shortness of snow is a serious drawback to ski-runners, especially now that so many people go to the Alps for winter-sport. Mr. Ward Muir had a perfect boom of winter-sport photographs in the press this year, and has gone to get more. He has been discussing with others the subject of press-photography in the photographic papers. His idea is that this field is virtually closed to the amateur, who has no chance of competing with the professional with his well-appointed army of developers, printers, etc., at his back; but that there are great possibilities in the field of what Mrs. Rufus N. Mallinson calls Illustrated Journalism, and it is here that the amateur has a chance to beat the professional; for it needs just the time and deliberation that professionals cannot give. It is, in fact, in this age of specialisation, a distinct branch of work for which the average skilful amateur photographer is already half-equipped; and if he can also put pen to paper satisfactorily, it is

only experience that is necessary to get to know what subjects will be acceptable to the various papers.

The Royal Photographic Society had an interesting meeting last month, when a paper was read by Mr. Swan Watson on the Portraiture of Men, which stimulated a very interesting discussion. Mr. Swan Watson had come all the way from Scotland to give the lecture, and his effort was much appreciated; for the attendance was good and Mr. J. Dudley Johnston, the president, was in the chair. Of course, the difficulty with such a big subject is to condense, and to waste no words on what has been said so many times before. This the lecturer succeeded in doing. He dwelt more on the psychological than the material side of portraiture, and enlarged on the necessity of not confusing character and expression. And so our preconceived ideas of the value of an instantaneous exposure were knocked on the head. We could not help agreeing with him; for one has only to remember Mrs. Cameron's portraits of the far-off, old wet-plate days, some of which had exposures of many minutes, to recognise the revealing quality of long exposure. Also, although Mr. Swan Watson did not emphasise the point, there are other delightful results of full exposure, such as the atmosphere obtained in the shadows and all low-toned parts of the picture, which no snapshot will render.

Governments in this congested little continent are waking to the importance of controlling air-photography over their countries. With this end in view, the Belgian authorities have issued a notification with regard to the use of photographic apparatus in aircraft flying over Belgium. There are certain zones, such as the northern and eastern frontiers, the Scheldt-Meuse Canal, etc., in which photography or the carriage of cameras is forbidden outright. In other parts, the use of cameras is permitted only to persons who hold a special license issued by the Ministry of National Defence, which, if held by a foreigner, is good for three months. The person in charge of the aircraft is responsible that those on board who have cameras are in possession of this special license, or that any cameras carried by passengers who have no license are stowed away in a place under his supervision.

To the outsider these regulations seem unnecessarily severe; for surely, to do work that could be useful to the prospective enemy, one must have special apparatus and skilled handling. The tourist's hand-camera could hardly record accurately the lay of the land. But no doubt the authorities know best, and the globe-trotter must be denied the graphic reminiscences of his first flight in order to protect a small and a brave country.

The experiments in the transmission of photographs by wireless between the States and this country, conducted by the Marconi Company in conjunction with the Radio Corporation of America, have been followed with much interest here, and a new exhibit, illustrating the process used, has been placed in the Science Museum South Kensington. It shows a photographic film of the Prince of Wales which was actually used at the Marconi telegraph office in London for the purpose of transmission—a photograph of the portrait as it was received by wireless in New York, and a copy of one of

the American newspapers in which it subsequently appeared.

In time to come, when the Prince is an old man, and many more photographic and other mechanical marvels have slipped into everyday use, this exhibit of one of the very earliest experiments in what we consider an almost uncannily wonderful development will, we must suppose, be viewed with tolerant interest as almost child's play by our descendants.

Our Contributing Critics

(Continued from page 228)

IN writing criticisms of pictures that appear monthly, it has been my aim to write helpful ones. I have tried to write one of that type of "The Road", but it appears impossible.

The one main fault with "The Road" is that it has too much foreground. This can easily be spared because, as the picture stands, the horizon is in almost the exact center. The proper trimming seems to be one and three-eighths inches from the bottom and one-quarter inch from the top. This trimming however, centers our interest on the tree-masses and, as these are found to be out of focus, the result is nil.

If this picture was remade on a brighter day, in such a way as to eliminate the blank foreground and using a smaller stop to obtain greater depth of focus, I feel that the result would be quite worth while.

S. B. PRIEST.

THE naming of the picture is well chosen, for the road stands out as a typical country-road, leading off into the distance, probably to some old farm-house. In fact, the road is, perhaps, almost too prominent to make the most pleasing picture. Had the maker trimmed the picture about three fourths of an inch at top and bottom, a more pleasing effect would have been obtained. As the picture now is, the immediate foreground is a little fuzzy and out of focus, while at this point it should be the sharpest. Upon close inspection, one can clearly see that the point of focus is several yards ahead. Also, the sky appears to be whiter than the snow, whereas, in reality, it should be darker. We think that if a skyshade had been used, the desired effect would have been obtained. The picture shows very good perspective; but I should like to see a trifle more contrast, which could be obtained by prolonging development somewhat. This would bring out the whiteness of the snow a little better and make the bushes in the foreground more distinct. With these few corrections, a picture of much merit could have been made out of a very ordinary scene.

P. C. SCHWARZMAN.

IF there is any criticism to be made of the tones of this print, I am not sufficiently expert to be able to make it. They seem to me almost perfect; but I consider the picture as a whole would be more pleasing if it had been made from a position a few feet to the left, to avoid the foreshortening of the road in the foreground. Again, this picture may be perfectly trimmed, but it gives the impression of sloping in the opposite direction from the slope of the horizon as seen in the view. In other words, it gives the uncomfortable impression that the picture is flowing downward, toward the right.

C. J. L'AMT.

THE road is actually wider than the width of the picture, and rapidly dwindles away to very modest proportions. Too short focus a lens, and it included too much space in picture. If this portion of road must be used, photograph it at greater distance.

The sky occupies virtually half of the picture-space. The snow lacks the brilliancy and sparkle which are so alluring to the eye and yet so hard to obtain on paper. Had the snow been broken up, it would have assisted in giving highlights and shadows, and more truthfully suggested a road. Sky and snow are too nearly of the same tone.

At a point on the left, just under first small, dark-topped bush, cut almost parallel with skyline. Use enough sky to give picture approximately $1\frac{1}{4} \times 2\frac{1}{2}$ and make it horizontal instead of vertical, as at present. Cutting across on an angle will avoid the appearance of road sliding out picture. Probably made on hill-side with sloping skyline, but not specially pleasing. Enlarge this and it will result in better proportions and a road that is not unthinkably distorted.

FRANK REEVES.

Retouching Smooth Prints

WHEN the smooth surface of a print will not take retouching with water-colors, if the surface is simply rubbed with pure oil of turpentine and this is wiped off with a cloth and what is left of the oil is evaporated by heat, a slight deposit of resin is left on the print which will now readily take the water-color.

EXCHANGE.

COMING EXHIBITIONS

APRIL 4 TO 18, 1925. First Annual Exhibition, International Circle of Pictorial Photographers, Walker Art Gallery, Liverpool, England. Honorable Secretary James Rowatt, Room 30, Central Buildings, Liverpool, England.

April 11 to 13, 1925. First Exhibition of Pictorial Photography under auspices of Seattle Camera Club to be held in Seattle Japanese Musical School, 316 Maynard Ave., Seattle. Secretary, Dr. K. Koike, 422½ Main Street, Seattle, Washington.

APRIL 17 TO 26, 1925. Hammersmith Hampshire House Photographie Society, tenth annual exhibition of pictorial photography, to be held at Hampshire House, Hog Lane, Hammersmith, London W. 6, England. Entry-blanks may be obtained from exhibition-secretary, Mr. J. Ainger Hall, "Norton" Ruispil, Middlesex, England. Last day for receiving prints, April 2.

MAY 10, 1925. V Salon International de Fotografia de Madrid. Last day for receiving prints May 10, 1925. Further information may be obtained from Secretario del Salon International de Fotografia, Real Sociedad Fotografia, Principe 16, Madrid, Spain.

MAY 15 TO JUNE 15, 1925. Second International Salon of the Pictorial Photographers of America to be held at the Galleries of the Art Center, 65 East 56th Street, New York City. Last day for receiving prints, April 18. Address all communications to John H. Kiem, Chairman Exhibition Committee, Art Center, 65 East 56th Street, New York City.



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



W. S. Davis Receives Merited Praise

IN the December, 1924, issue of *Revue du Vrai et du Beau*, published at 12 Rue Royer-Collard, Paris, we find two reproductions of paintings by our friend William S. Davis and nearly two columns of text devoted to a description of his work with the brush and with the camera. The occasion of this reference to Mr. Davis' work was the review of L'Exposition de Newport. We are glad that the years of effort and hard work are bringing their reward.

Not in Competition with Aërial Photographic Companies

IT may be stated that whenever a privately owned and properly equipped aërial photographic company can do the work now being done by the U. S. Air Service, the War Department will not allow its planes or personnel to be used. It is the policy of the government to foster and to encourage the growth of privately owned aërial photographic concerns in all parts of the country.

There is a New Wollensak Leaflet

SOMETIMES more information is gained from a few short, carefully written sentences than from a number of paragraphs. This is the case with a new leaflet issued recently by the Wollensak Optical Company of Rochester. Any reader who wishes to be well informed on this firm's product in a very few moments will do well to obtain this attractive leaflet.

A Focusing Microscope from Vienna

RECENTLY we were presented with an automatic focusing microscope with which to view the image on the groundglass of a camera. By means of a rubber suction-collar it sticks firmly to the surface of the glass and thus enables the observer to view the focus of the image. It may be placed anywhere on the screen and is readily removed. Siegfried Wachtl, Newbaugasse 36, Vienna, Austria is the inventor. Perhaps he does not realise the large number of roll-film cameras that there are in the United States and how comparatively few persons use a groundglass at all with which to focus.

New Photo-Paper Firm is Organised

CERTIFICATE of incorporation was received recently and officers were elected for a new corporation to engage in the field of manufacturing sensitised photographic papers, and to be known as the Wilmot Company.

In its president, Frank Wilmot, this infant corporation in the already large family of Rochester manufacturers of photographic supplies, has a man who is well known throughout the photographic trade as one of the pioneers in the manufacture of sensitised paper.

Other officers are: Vice-president, Charles C. McCord; secretary-treasurer, Charles A. Brady. The new com-

pany is incorporated in New York state and is capitalised for \$100,000.

Mr. Wilmot has been closely identified with the photographic paper industry since 1890, when he began with the Eastman Kodak Company. For twenty-three years he was president and general manager of the Defender Photo-Supply Company of which he was the founder. After severing his connections with the Defender Company, he became vice-president of the Haloid company, and later was connected with the Rectigraph company, which specialised in the manufacture of photographic copying papers. The finished product is expected to be on the market in the near future.

Dr. Bigelow Will Open Girls' Camp

OUR readers are familiar with the splendid work being done by Dr. Edward F. Bigelow, president of the Agassiz Association, Sound Beach, Conn. In order to increase the usefulness of the association and to obtain more revenue, Dr. Bigelow will open The Cornucopia, Home—Camp—School, for girls during July and August. The tuition will be moderate and we hope our readers who have daughters will get in touch with Dr. Bigelow.

A Subscriber Wins \$300 Prize

MANY of our readers will recall the name of M. J. Burelbach, Chattanooga, Tenn., who has frequently entered pictures in our competitions and has proved to be a very enthusiastic worker. We are very glad to report that he recently won the \$300 Grand Prize offered by the Shakespeare Company. He very kindly referred to PHOTO-ERA MAGAZINE as having helped him in his photographic career and ended his letter with the statement, "Of course, I couldn't do without my PHOTO-ERA."

Photographic Activities at the Brooklyn Institute

THE one-man exhibition at the Brooklyn Institute during February was of the work of Nicholas Haz. Mr. Haz is a portrait-painter turned photographer and his work reflects his artistic training and study, particularly in the treatment of shadows in portraits. This was noticed in "The Picture Hat" and "Frانيا" two charming studies of large heads with shadows, deep but filled with detail and almost luminous in quality. One very striking head "Olga Barabini" had strongly contrasting light and shade with very few halftones. Among his portraits of men were noticed "Charles A. Wagner" and an unusual study of the late George Bellows in his studio with an easel and frame. Other pictures included some dancing-figures, some lively children, and interesting character study of a Texas Ranger who looked like a Spanish bandit, and "Greeting Ladies, Greetings" a clown in theatrical pose. Mr. Haz spoke on composition before Miss Lauffer's class and suggested some different angles in his point of view. He dwelt most particularly on

simplicity and maintaining a center of interest in composing a picture, and suggested ways of emphasising this center of interest. Afterward he demonstrated his ability as a critic by criticising prints submitted by the class.

Mr. Zerbe's class had a Sunday portrait-session, and had good opportunity to use the new artificial lights whose construction he has demonstrated to them this winter; for it turned out to be a dark and rainy day.

The Twelfth Pittsburgh Salon

THE catalog of the Twelfth Annual Pittsburgh Salon of Photographic Art, held March 3 to 31, 1925, has come to our desk. It lists 334 prints from eminent pictorial workers in Great Britain, Italy, Spain, Austria, Poland, Norway, Australia, The Bahama Islands, Canada and the United States. It contains exquisite halftones of print, by John A. Whitehead, Lionel Wood, F.R.P.S., and Anson Herrick. A tactful and effective innovation—no prices are given to any of the prints. Instead, a notice, printed in large type, appears conspicuously in the catalog—"MANY OF THE PRINTS ARE FOR SALE. IF INTERESTED INQUIRE AT DESK."

This disposes, at this notable exhibition, of the embarrassing question as to prices of photo-pictorial works of art.

W. A. F.

Standardising Lens-Symbols—Will You Co-operate?

OUR attention was called to the fact that in one issue of PHOTO-ERA MAGAZINE there were six different forms of expression for the speed or F-value of a photographic lens. The subject was mentioned not to criticise but rather to suggest that it might be well to look into this matter. Is there no standard that may be adopted? It would seem that manufacturers, photographic supply dealers and writers could agree upon some form of expression which would be acceptable and thus avoid the present confusion.

PHOTO-ERA MAGAZINE offers its space and co-operation to bring the subject to the attention of its readers. Moreover, it invites manufacturers, dealers and writers to make constructive suggestions and offer helpful comment in the form of letters or short articles. Please remember that it is not the purpose of this invitation to begin an argument. Let all correspondence be aimed to reach the objective; namely, one form or system to mark lenses which are manufactured or used in the United States. Let us have a frank, good-natured exchange of ideas which may lead to some constructive accomplishment. Will you co-operate by giving us your suggestion?

Burroughs Wellcome & Co.'s Exhibit at Olympia

THE photographic exhibit of Burroughs Wellcome & Co., at the Ideal Home Exhibition, Olympia, London, England, showed interesting examples of work done with "Tabloid" Photographic Chemicals. For example, the bromide enlargement of Frozen Lake Camp, with Mount Everest in the background, reminded the observer of the important part played by the firm's products in illustrating one of the most heroic epics of modern times. "Tabloid" "Rytol" has, in fact, been the chosen developer of the official photographers of the three recent Mount Everest expeditions. Since its introduction, "Tabloid" "Rytol" Developer has

enjoyed the confidence of the most famous photographers including those associated with royal tours and historic expeditions such as those of the King, the Prince of Wales, the Duke of Connaught, Scott, Shackleton and very many others.

"The Taj Mahal by Moonlight" was the subject of a second enlargement realistically toned with "Tabloid" Blue Toner, and a third provided an example of the rich browns obtainable with "Tabloid" Sepia Toner. Other photographs illustrated the use of various "Tabloid" Developers, "Tabloid" Chromium Intensifier, "Tabloid" Ammonium Persulphate, "Tabloid" Potassium Ferricyanide and "Soloid" Photographic Stains.

The simplicity of present-day photography, as compared with its complexity in the past, was strikingly demonstrated by an exhibit of an old-time bulky photographic chest, comprising the essential chemicals, solutions and scales in contrast to the compact modern outfit of "Tabloid" Photographic Chemicals providing all necessary materials for developing and fixing.

A practical demonstration of the ease with which correct exposure can be calculated was given by means of a giant model of the "Wellcome" Exposure Calculator. This was so arranged that visitors could test the instrument themselves.

The Demand for a Good White Ink

AT the present time there is a constant demand for a good, reliable white drawing-ink—an ink which may be used to write on negatives, prints and albums. To be sure, there are many white inks to be obtained. Some will do what is claimed for them and others will not. Without in any way disparaging other good white inks, we do know that Johnson's Snow White does all that is claimed for it. We have put it to test in more ways than one. Moreover, it has been in constant use in our office for a number of years. If our readers have tried other inks without success, we are glad to recommend Johnson's because we are confident that it will make good and do all that its maker says it will do, provided the instructions are carefully followed. We might say that Mr. Johnson has made a specialty of white ink and that accounts for the excellence of his product.

In Good Old New Hampshire

PERHAPS we may be pardoned just a word with regard to some splendid photographs which may now be obtained from the Pratt Studio, Warner, New Hampshire. It has been our privilege to examine the workmanship and the subjects, with the result that we suggest that those of our readers who love the old Granite State, with her mountains, intervals and lakes, will do well to get in touch with this studio and obtain prices of prints for framing. Naturally, we feel proud of our state and proud of any photographer, painter or writer who can do her justice.

MASTERKRAFT PICTURES PUBLISHERS, Manchester, N.H., are in the market for lake, mountain and sea-shore pictures and negatives of scenic value of New Hampshire and New England, accompanied by title and name of owner of negative. Suitable subjects up to 8 x 10 can be used. Those accepted will be paid for, the others promptly returned. Price should accompany print or negative with permission given for reproduction.



OUR LETTER-BOX



Prices of Pictorial Photographs

HAVE read your discussion of prices on artistic photographs with great interest. I am making a good many bromoils now and the ordinary print has been treated with every precaution to make it permanent; not more than twenty-five prints are made from each negative and I furnish a written guaranty to that effect, also in regard to their permanency. I am having some stickers printed to be pasted on the back of the print and will forward one as soon as they are done. The price on my bromoils 11 x 14 is from fifty to sixty-five dollars and the plain print twenty dollars.

WALTER P. BRUNING.

I HAVE read with considerable interest your editorials in the January and February issues of PHOTO ERA MAGAZINE in which you comment on the low price of pictorial photographs as compared to paintings—often of less merit.

There are a variety of reasons for this situation; but it seems to me that the main reasons lie, first: in the fact that very little attempt has been made to educate the public to the value of pictorial photographs for mural decoration; the purchasing public, outside of the professional and amateur photographer, hardly distinguishing between a pictorial photograph and a snapshot; and second: that there are no advertised selling-agencies—the lack of selling-agencies being largely responsible for the lack of demand. How different the situation as to paintings. I pick up *International Studio* or *Scribners*, or one of the other first-class magazines, and I find any number of advertisements of paintings for sale; but I have yet to see anywhere a single advertisement of a dealer who handles pictorial photographs. If I want a Misonne, a Keighley or a Whitehead, for instance, I must follow the cumbersome procedure of writing them individually and asking them as a favor to sell me one of their pictures; and how many, even of those who would like to have some of the works of the leading pictorialists, will take the trouble to do that. Such being the situation, of course there is no demand; and, as we know, price is largely a matter of demand.

ERNEST M. CHILD.

I WAS glad to see the question of "how much" raised in your magazine, for it is one of interest to me as an amateur with Tessar tastes and rapid rectilinear income, and very little spare time. For the last three or four years I have had about \$150.00 per annum from my hobby, receipts not profit. This has come from sales of my own work and a few enlargements made for others. The latter are easily arranged by charging standard, local prices for the work and I could get a little better very often. With regard to the former, a different policy must be pursued. It is obvious that one is entitled to ask more for an 8 x 10 print of one's own work than for a same size print from another's negative. For my own work, 8 x 10, print, I have asked from \$1.75 to \$3.00 according to subject and the difficulties involved. For a local view made in the first place for the album and to send to friends abroad,

and caught on the fly, as it were, \$1.75 or \$2.00. For a picture that has required more than one visit or has been under observation for some time, a higher price \$2.50 to \$3.00 is asked. In this are included architectural subjects, snow-pictures and most landscape-subjects. This, for 8 x 10 enlargement from 4 x 5 negative, and I always tell the buyer that if the print fades or develops stains I will make it good. My fixing-bath is never used for the limit of prints and these are hand-washed, from tray to tray. Mine is all straight work.

With the exhibition-print the case may be a little different. It has been approved by an artistic and independent jury free of local prejudices and preferences, and it seems to me that a higher price is justified.

After all, the amateur's pictures are made for his own pleasure, and it seems to me that while the prices I have given are not high they are not unprofitable, and compare perhaps not unfavorably with the good professional portraitist who purveys 8 x 10s at \$25.00 a dozen up. I may add that I have discussed this matter with one of our leading professionals here and my prices are partly the result. Perhaps in the not too distant future I may ask a little more. I'm thinking of it. But when any person can telephone a photographer and get him to photograph almost anything and supply one 8 x 10 print for \$3.50 to \$5.00, how is an amateur to justify the same charge to an uninterested person for something made originally for his own pleasure.

A CANADIAN READER.

YOUR editorial on the Prices of Pictorial Photographs was very interesting, and Mr. O. C. Reiter's comments on it in the February issue of PHOTO-ERA MAGAZINE seem to bring out one phase that has been overlooked by your other contributors.

Oil-paintings, if subject to innumerable duplication, would not bring the prices they do, regardless of the fame of the artist. Aside from the question of permanency of results, the purchaser of a pictorial photograph—or a picture produced photographically, as I prefer to put it—knows that anyone who has the price may obtain exact duplicates, just as the purchaser of a ready-made suit realises that he may meet his twin on the street at any time. If pictorialists would agree to make but a single print, and sell the negative with the print, or destroy the negative, it would enhance the value of the print as there could not possibly be made duplicate prints.

Also, it would seem to me that gums, oils, bromoils, platinotypes, and similar reproduction processes should bear a considerably higher price than bromides and chlorides. A bromide, even with an admitted life of twenty years, is fugitive when compared with a gum or oil which should endure as long as the paper base endures.

In this connection, I should like to ask a question. I have in my possession old-time portraits made on printing-out paper which are thirty-five or forty years old and, apparently, as bright as the day they were made. And they seem to offer a further life of at least as long. Did our forefathers possess some secret affecting the longevity of their work, or is this question of permanency a myth—speaking now of photographs properly fixed and washed?

E. H. BROWN.



THE PUBLISHER'S CORNER



As One Friend to Another

THERE are times in all our lives when we are tested almost beyond human endurance—when business responsibilities, personal illness and loss of loved ones seem to combine to crush out all courage and hope. These situations seem to come in cycles. For a time, all is well; then comes the leaden weight of sorrow or worry; and the blue sky, the birds, the flowers—all nature and man combined fail to bring comfort and peace. But just as all seems to be black despair, there is a rift in the storm-cloud and a bit of blue sky peeps through. We lift dull eyes toward the break in the cloud. Suddenly, a glorious shaft of brilliant sunshine streams out upon the retreating storm; and, ere long, we are made to realise that a Heavenly Father directs our destinies and in His ways there is comfort and peace. A little preachment? Yes. Those of my readers who have not received prompt replies to letters, criticisms of their pictures or who wonder at the delayed arrival of the magazine will understand now; and, I am sure, will wait patiently for an early return to normal conditions.

Unavoidable Omissions this Month

OWING to the increased amount of material for the Stereoscopic and Kinematographic departments, it becomes necessary to omit our "Picture Market", "Recent Patents", "Book Reviews" and some other items. I am glad to note the increasing reader-interest and hope that it will mean a larger circle of friends who have a common aim—to make a success of photography. Let me add that PHOTO-ERA MAGAZINE is not compelled to adhere to a certain number of pages for each department. When the interest and material in any department demands more space, it shall have it. If interest subsides, there will be fewer pages. It is for the readers to decide.

The Honorable Mention Group

ABOUT a year ago an effort was made to reward winners of an Honorable Mention by including their pictures in a group of selected entries. This was done in addition to awarding the usual Certificate of Honorable Mention. In practice, this idea had not worked out so well as anticipated. In the first place, as a rule, there are more meritorious Honorable Mention pictures than can possibly be arranged in a group. But of even greater moment is the unavoidable mutilation of the mounts and, sometimes, damage to the prints themselves. Usually, this always happens in cases where the contributor desires that his prints be returned for some special reason. To be sure, according to the rules, Honorable Mention prints become our property; but we are very glad to co-operate by returning such prints whenever it will be of material advantage to our readers. After consulting with a number of our subscribers, I am led to feel that it will be better to discontinue these Honorable Mention groups; and, if possible, devise some better arrangement which will add to the interest in the award with-

out the unavoidable mutilation of the carefully prepared prints. For the present, we will select certain Honorable Mention pictures and publish them as we can find room in our pages. Any suggestions will be very welcome and may they be constructive.

A Snowdrift Found in Georgia

DESPITE the popular opinion that snowdrifts are confined to the Northern States, let me prove by photography that snowdrifts do occur frequently in the sunny south. Perhaps the reader thinks that I refer to the

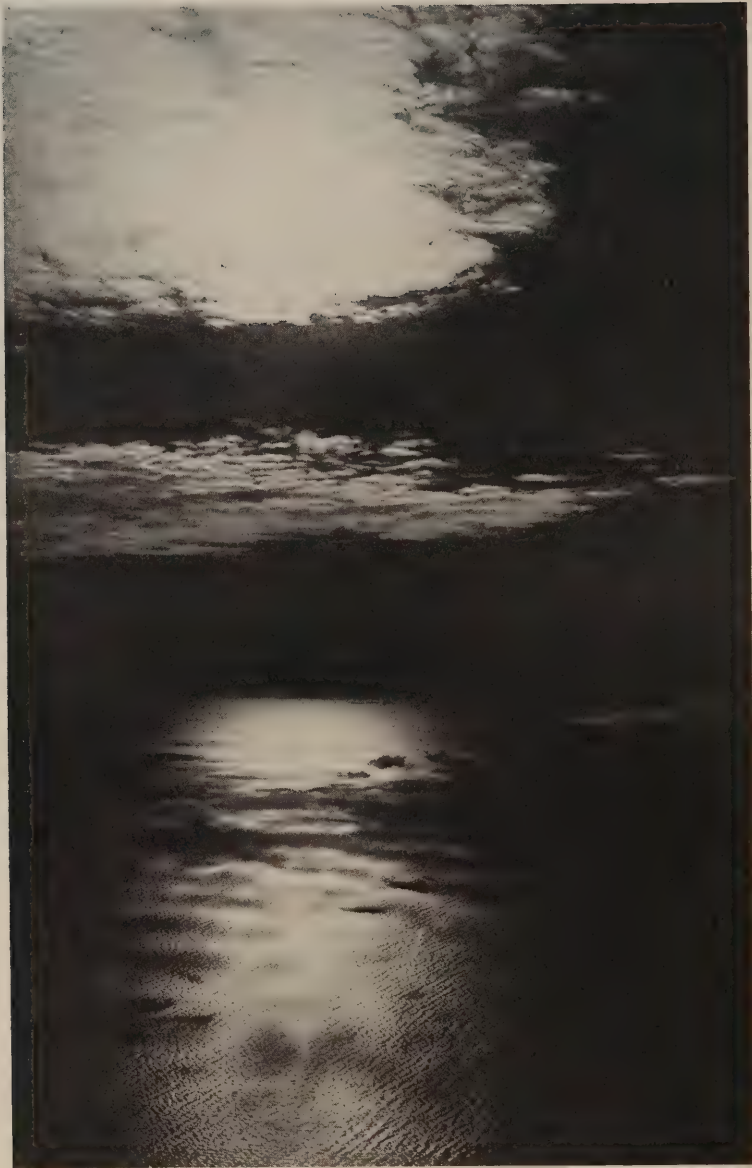


SNOWDRIFT^h SIDNEY L. WOLFSON

label on the box. Not at all! The snowdrift I have reference to is the little pickaninny who appears to be wondering what it is all about. This little glimpse of life in Georgia was sent to me by Mr. Sidney L. Wolfson, The Weirs, New Hampshire. It was made in April, 1924 at Savannah, Georgia with a 1A Autographic Kodak, Jr., F/7.7 anastigmat lens, stop F/7.7; 1/25 second. Nothing very pictorial about this little picture, nor is it technically perfect; but then it does have human interest and appeal. Isn't that what really makes a picture after all? Yes, we need composition and technique; but without heart-interest how cold and formal they are—critics notwithstanding.

Here is Something to Think About

THE number of entries in the Advanced Miscellaneous Competition, which ended February 28, 1925, was greater than for any PHOTO-ERA Competition in recent years. Those who like miscellaneous competitions in preference to a specified subject made themselves felt by sheer weight of numbers. If the majority prefer a miscellaneous competition every month, it will be given them. However, those who like a different subject each month are still to be heard from. Who knows, they may have their way after all.



(Photographed from U. S. S. Los Angeles)

APPROACHING TOTALITY
WATSON DAVIS



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The Quest of Beauty

ALLEN H. BENT



UST as the world is made up of darkness and light, of joy and sorrow, of good and evil, so is it divided into beauty and ugliness. There are many forms of beauty, and if anyone thinks that its appreciation is confined to America and Europe, or that it is of recent discovery, let him read what was written by one of the Chinese poets, Hsu Kung Tu, who lived more than a thousand years ago:

A mist-cloud hanging at the river's brim,
A hut rose-girdled under moon-swept skies;
A painted bridge half-seen in shadows dim,—
These are the splendors of the poor.

Mrs. Anne Bosworth Greene in her delightful book, *The Lone Winter*, says "We are too lazy, or too busy, or too unrealizing to get at beauty; we have to be shoved out into it, and if it is your vocation that does the shoving, thank it with all your soul."

The quest of beauty is the mission of the photographer, whether his wanderings are near at home or far afield. The camera is now an important part of the equipment of the traveler, great or small, and his explorations are no longer confined to the earth, for there is beauty above the clouds, and at the bottom of the sea. To find beauty, to preserve it, to pass it on, and more important still, to encourage others to see it at first hand, these things are, or ought to be, ever present in the mind of every one with a camera. Beauties have been spread before us with a lavish hand, they can hardly be seen by people who cultivate the mile-a-minute habit.

Those who live within sight of the mountains, desert, or sea ought to consider themselves especially favored. If it is possible to camp out in some of these surroundings, so much the better. He who has slept under the stars at considerable heights will realise the beauty of night. Sir

Francis Younghusband says in "The Heart of Nature", that on his long journey across the Gobi Desert—twelve hundred miles with no European companion—in the great stillness, night after night, he came to feel that he was "more connected with the starry firmament than with this Earth" . . . "In that unbroken quiet and amid this bright company of heaven my spirit seemed to become intenser and more daring." Fortunate man! No wonder he could say, "The frets and pains of ordinary life are stilled. Deep peace and satisfaction fill the soul."

His address upon "Natural Beauty and Geographical Science," read before the Royal Geographical Society in May, 1920, and included in the volume just quoted from, ought to be read by every student of geography, young or old, and by every dweller in our big cities. Landscape-photographers and other explorers of the great out-of-doors know something about this, though none have written, or could write, with the exaltation of the distinguished explorer of Tibet, Kashmir and the Himalayas.

"Beauty", he says, "is a quality which appeals to all men for all time, and appeals to them in an increasing degree. It is something which all men can admire and enjoy. . . . Also the more Natural Beauty they see, the more, apparently, there is to see. Poets in their poems, and painters in their pictures, are continually pointing out to us less keen-sighted individuals new beauties in the features of the Earth. The mineral wealth of the Earth has its limits; even the productivity, though perennially renewed, is not unbounded. But the Natural Beauty is inexhaustible; it positively increases and multiplies the more we see of it and the more of us see it. So it has good claim to be considered the most valuable characteristic of the Earth."

It is not necessary to go to the Himalayas or the great deserts to find Natural Beauty, much

as we would like to. Whittier reminds us that
 "The Beauty which old Greece or Rome
 Sung, painted, wrought, lies close at home,
 We need but eye and ear
 In all our daily walks to trace
 The outlines of incarnate grace,
 The hymns of gods to hear."

Hill and valley, lake and river, cliff and shore,

tree and flower, cloud and sunset, some of these are surely within easy reach, waiting to be discovered.

The quest of this natural beauty, whether near or far, is one of the joys of life to the man with a camera, whether amateur or scientist; and, if he does not feel as though he wanted to become a poet and an artist as a result, it is his own fault.

The Portrait-Painter

(From the *New York Times*, May 18, 1924.)



ALMOST at the exact time when the State portrait of the King of England appeared on exhibition in London, members of the Canadian press were presenting to the National Press Club at Washington a likeness of President Harding. Thus the high official value attached to portraiture of the formal sort in lands with long artistic traditions finds two fresh examples. The painting of a dignitary has become in some of these countries almost a heraldic rite. But it effects what boast of heraldry and pomp of power could not. It registers the aspect of the man—not as the camera sees him, but as his fellows know him.

The great number of existing portraits of former eminent Englishmen gives King George's subjects an added reason to have their leading men of today painted, for thus alone can the gradually collected record be made complete. If a photographer, instead of Holbein, had left a curious posterity the likeness of Henry VIII., or if a fashionable camera portraitist of the era of Charles II., instead of Lely, had preserved the charms of the ladies and gallants of that day, the photograph might now have preference over the work of the brush. Things have actually happened the other way around.

In our own country the mechanical likeness has supplanted the painted rather generally. The camera was as democratic as our railway passenger-coach, and swift in its workings. It pictured rich and poor with equal fidelity, and it wasted none of their scant leisure doing it. As most of the important Americans of the nineteenth century began life in anything but affluence, and as they seldom acquired enough leisure to sit to a painter, they naturally turned to the photograph studios, with but few exceptions, even among the most eminent. This serves to account for the paucity of painted portraits of the leading men of the past two generations.

The camera fortunately found in Lincoln a good subject. Owing to this happy chance,

we have several excellent likenesses of him, including the familiar full-face head that hangs on the walls of millions of homes. Lincoln's quality of "filming" well has led to the extensive use of his figure in the motion-pictures. An impressive photograph of Grant preserves his striking expression. The camera likeness of Lee may rank with those of his two great opponents. When we come to Roosevelt, we meet with an abundance of lively photographs, many of them snapshots, for the rapid film came into use in time to catch him in full vigor. But in all this abundance of pictures of him there seems none that common consent has yet picked as "the" Roosevelt.

The photograph, in any case, does not serve the same purposes as the painting. The color of the painted portrait, its size and its vividness, adapt it to display. They render it difficult to reproduce for the sitting-room wall or for the printed page. Though such portraits are extensively reproduced in England and elsewhere, they frequently lose their character in the process. But this drawback does not diminish the value that they possess as records. The kind of truth attained in the work of a superior portraitist cannot be duplicated by mechanical means, for he selects the notable traits of his subject with an eye to presenting not alone the physical aspect, but the sum total of the striking things about the man, reckoned in their proper proportions. The best photographic portraitists themselves strive to approximate the discriminative quality of the brushman's work.

The standard Washington of Gilbert Stuart and the familiar likeness of Hamilton supply so large a place in our impressions of two of our foremost Americans that we might well wish to have portraits of all our men of note from equally competent hands. In the case of some this can now never be, but we can still take thought of the future.

[Read Mr. Eickemeyer's reply on opposite page. EDITOR.]

Photography vs. Painting

RUDOLF EICKEMEYER



One whose career and best years have been spent in photographic portraiture, I found a keen interest in the editorial entitled "The Portrait Painter", in *The New York Times* of May 18, 1924.

The admirers of portraits by masters in the art, will feel the more distressed when they realise that the succeeding generations will judge the present—not by painted portraits, but by photographs which those skilled in the craft have created. In other words, the painter's results will be valued more as works of art than as portraits. I venture this prediction, fully realising from long experience the limitations of the camera, its principal fault being that it sees with but one eye. As a consequence, planes are not well differentiated, the negative lacking what the French call *enveloppe*.

That the photographic portrait is not a perfect transcript of the original, and is not what our two eyes see, is true, and easily demonstrated by looking at an object with one eye and then normally; or comparing such a portrait with two, made with two lenses and viewed through a stereoscope. Here is life, to fairly thrill one. Would that such records could be made and freed of the cumbersome device necessary to view them properly.

Confessing the primal weakness of the camera, I venture to state, and without fear of contradiction, that in spite of it the lens draws with greater accuracy than is possible with the human hand. Admitting that, when used by unskilled workers, the camera plays havoc with proportions, it has won and held its place because it is the best possible medium to record the person it portrays. Examine, even casually, the portraits of women by Reynolds, Romney, Raeburn, Sir Peter Lely, Sir Godfrey Kneller, Sir Thomas Lawrence, and others of that glorious era of English portraiture. You will invariably find that the faces, while retaining certain dominant characteristics, are as though made with the assistance of a square and compass. Those who have studied the subject know how rare it is to find a human face so true in drawing, that either side may be photographed with equally satisfactory result.

The portraits mentioned are only in rare cases likenesses, which is the principal end and aim, and the basis of all great portraiture. The artists have not told the whole truth. The portraits of the men are more literal; but they lack even here the courage of Holbein, Rembrandt and

Hals, whose work is as varied as human nature itself with no thought of following a formula, often dictated by fashion.

You say, "The photograph in any case does not serve the same purposes as the painting. The color of the painted portrait, its size and its vividness, adapt it to display. This renders it difficult to reproduce for the sitting-room or for the printed page".

This I feel is only true in part. Save in rare instances the color is a cloak that conceals poor drawing in the many portraits of today. Since the advent of the orthochromatic plate, which with a color-screen gives an almost perfect translation in monochrome, the portraits are not as you say, "difficult to reproduce". Such reproductions are not popular solely because the camera discloses them as poor likenesses.

Few there are who are not awakened to a form of enthusiasm by the usually brilliantly colored portrait and gorgeous gold-frame of no mean size, and misled by their ecstatic appeal. On receiving the true impression by seeing the photographic reproduction, we turn with a sense of relief to a direct camera-interpretation of the subject, which is unhampered by mannerisms, and more truthful than any hand can make it. You mention the portraits of Washington. I venture to say that impressions from the many records—all virtually alike in expression, and showing but one aspect of the man—awake a longing for a few snapshots of him under varying mental conditions.

This portrayal of but one phase compels me to disagree with you in regarding Lincoln as a good subject, for the majority of his photographs represent him as a decidedly sad person. These pictures have not only influenced biographers, but the world at large. And yet Lincoln's wealth of stories show that he possessed a keen sense of humor. In spite of well-nigh crushing burdens, it cannot be that all of his days were sad. His stories prove that they were not. Yet in the sight of the camera he discloses not the slightest trace of any phase but soberness, bordering at times on a sadness which enveloped the period of his noblest achievements.

[We are glad to give space to the opinions expressed on this and the preceding page. We were glad to publish Floyd Vail's straightforward article in the March number. It is our desire to welcome constructive comments from all authoritative sources. However we may not always agree with the contributor's viewpoint. EDITOR.]



LANDSCAPE DURING TOTALITY

L. V. RICHARD

The Recent Solar Eclipse

WILLIAM S. DAVIS



AS Long Island, New York, lay directly in the path of totality of the recent eclipse of the sun, it was the chosen objective of many observers—scientific and otherwise—who gathered to witness the event. The eastern tips of the island afforded especially desirable vantage-points as the center of the path of totality covered Orient Point at the tip of the north fork and Montauk Point at the termination of the south branch, thus allowing observers at these spots the longest time to view the corona—a little more than two minutes during the period of totality. Because the writer's home-town of Orient was so favorably situated for the purpose, he determined to improve the opportunity to obtain a few photographic souvenirs—if the atmospheric conditions proved favorable—in addition to observing the event with the naked eye. As a result, the following notes and illustrations are offered, not as scientific data but simply as the experiences of an ordinary spectator.

Visual Impressions

January 24, 1925. Time: morning. Cold for Long Island, the mercury hovering around six degrees above zero, and the air clearer than is

usually the case along the coast. Only a slight breeze from the west and northwest is felt after several days of high winds. The snow-covered fields glisten in the early morning sunshine and a sense of expectancy seems almost to pervade the air in anticipation of that greatest of visual astronomical phenomena—a total eclipse of the sun.

To the south, over Shelter Island, appears the silvery form of the Navy dirigible "Los Angeles" with a party of government scientists aboard. She swings away, heading southeast toward Montauk, slowly gaining in altitude meanwhile. Somewhat later the whir of airplane motors is heard overhead as other official observers take stations above the eastern part of Long Island.

The light is becoming yellow in quality, and in the southeast gray, stratiform clouds make their appearance, blotting out the sun and causing much concern to watchers below. Through the spaces between the clouds the sun peeps out now and then, as the scheduled time for the performance to commence (8.01 A.M., eastern time) approaches. At last, as a glimpse is caught of the sun, a well-defined nick is visible in the upper right-hand edge of the sun's disk where the moon has begun to cross its face. The

performance has begun! Slowly the dark circle of the moon's orb creeps past, hiding more and more the glowing face of the sun; and, as the luminous power of the sun's rays wane, the atmosphere takes on a peculiar tint that baffles accurate description. It might be called amber-like in hue; yet, it is different from the warm glow so commonly seen in hazy weather in the early morning or late afternoon. Fortunately, the clouds have now disappeared, leaving the air crystal-clear in appearance, and through a smoked-glass one perceives that our friend the sun is reduced to the form of a new-moon.

night. The weird twilight takes on a greenish-blue hue, ranging from a subdued glow near the horizon to a darker tone above, the whole being rather suggestive of moonlight, but less deep; the general illumination being sufficient to permit one seeing considerable detail in distant objects.

The dramatic moment for which thousands have been waiting is at hand, the last minute rays of sunlight are blotted out in a swift rush and literally in a flash the *corona* in all its glory bursts upon the eye, a vision of flaming beauty as the streamers of violet-white light that constitute the outer corona spread in waving clouds



FIGURE 1

WILLIAM S. DAVIS

At this time—some fifteen minutes before the commencement of totality—characteristic crescent-shaped cast-shadows are noticed upon the sides of nearby buildings, the patterns thus cast by the intervention of bare tree-branches being somewhat suggestive of the frost-work upon a window-pane.

About a minute before the last rays from the sun are cut off, vague shadows start flitting over the surface of the snow in long, wavering lines—the “shadow-bands” about which so much has been said and written. These lines of gray shadows pass swiftly, rank upon rank, the parallel rows perhaps eighteen inches apart, moving from the southwest toward the northeast. In the subdued light a few birds wing their way through the hushed air, apparently under the impression that they are seeking shelter for the

beyond the dazzling intensity of the flaming band encircling the dark outline of the moon, which astronomers call the *inner corona*. Points of light of greater intensity flash and sparkle against the general glowing mass, the only familiar kind of light to which that of the corona might be compared in apparent intensity and color being a powerful electric arc viewed at close range. At intervals, the prevailing silvery light of the corona is emphasised by the appearance of glowing orange-spots as masses of flaming hydrogen-gas shoot out thousands of miles into space from behind the darkened disk of the moon.

A few degrees to the right of the hidden sun Venus, Mercury and Jupiter—the three forming the points of an imaginary triangle—glow brilliantly in the darkened sky; but beautiful as these are to the eye one can spare them only a

hasty glance, for the seconds are swiftly passing during which the marvelous corona reigns supreme. As we watch it, trying not to miss anything, there occurs with startling suddenness a blinding flash of light from the upper right-hand side of the sun's hidden disk, so like a gigantic explosion that one involuntarily expects a report to follow. Light returns to the earth far more swiftly than it waned; and, for a few seconds, the "shadow-bands" again flit past until obliterated by the rapidly increasing strength of the sunshine which floods the snowy fields. The climax is over—its splendor a memory.

For approximately an hour and a quarter longer the moon continues its transit between the sun and the earth; but during this phase of the eclipse, nothing of especial interest is to be seen by visual observation. Finally, the sun emerges as an unbroken circle, the event is ended, and the watchers turn once more to everyday affairs.

Some Photographic Records

The photographic part of my story now begins. The outfit chosen to photograph the eclipse consisted of an old 4 x 5 long-focus stand-camera, mounted upon a good solid tripod. Wishing to obtain as large an image as the resources of my equipment would permit, I employed the 17-inch front combination of a good three-foci convertible rectilinear—in other words a long-focus single achromatic lens, which possessed the advantage of having no air-spaces between its components, which in lenses of more complicated form are frequently a source of trouble when photographing highly luminous bodies. During some of the exposures I capped the lens with an Ingento series A ray-filter. The plateholders were filled with fast double-coated orthochromatic plates—the Standard Orthonon. A $3\frac{1}{4} \times 4\frac{1}{4}$ plate-camera fitted with a 6-inch F/6.3 anastigmat was placed near the larger outfit where it would be available for photographing special phenomena connected with the eclipse, thus avoiding any disturbance of the long-focus camera.

The standpoint selected was level ground only a few feet above sea-level; but from which a clear view could be had of the southern sky over a prospect of snow-covered fields.

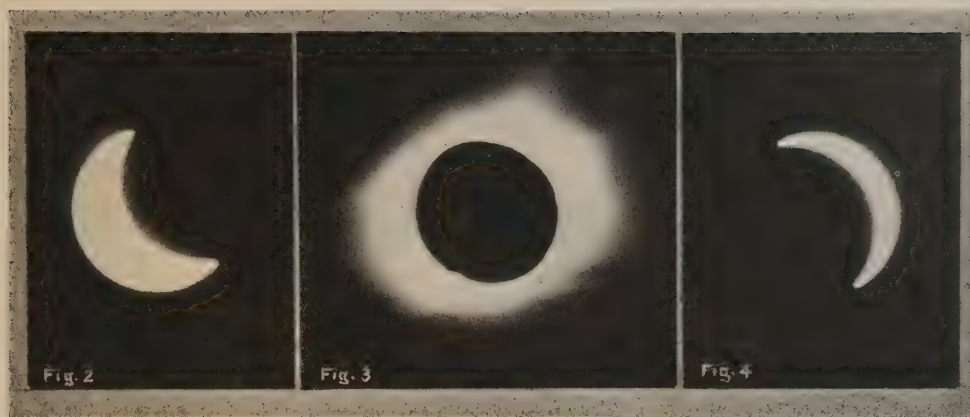
My first exposure, shown in Figure 1, was made at 8.16 A.M., fifteen minutes after the commencement of the eclipse. This shows the character of the clouds which partly obscured the sun for awhile. Being a contact-print from the original negative, Figure 1 also shows the size of image of the sun produced by a 17-inch lens. I employed the stop marked F/32, which

gave me, with the single lens, an effective aperture of approximately F/90; capped the lens with the ray-filter before mentioned and gave an exposure of one second.

The next phase recorded is shown in Figure 2, made at 8.51 A.M.—approximately twenty minutes before the beginning of totality. By this time the clouds had entirely disappeared, leaving the air exceptionally clear to all appearances. On account of the strength of the light I used the smallest lens-stop available, which possessed a working-value of close to F/128. The same exposure was allowed—one second with ray-filter.

Figure 3 represents the corona as seen during the first half of totality. Before making this exposure I removed the ray-filter and opened the lens to full aperture—F/8 of the doublet, which gave an effective aperture of practically F/23 with the 17-inch single element—and then exposed the plate for twenty seconds to make sure of registering the less luminous parts of the outer corona that were visible to the eye. However, from the manner in which the image developed, I believe a considerably shorter exposure would have been sufficient for the purpose. It would have given a more satisfactory finished record by virtually preventing the distortion of the moon's disk now noticeable. This was caused by movement of the moon while the lens was open. Regarding this distortion, I may point out that the deviation from a true circle in the shape of the moon is *not* the result of an *elongation* of the image, such as would occur from giving a long exposure upon the moon at night; but, instead, it is brought about by a *contraction* of the image of the moon's disk, due to the fact that the moon, being a dark body during a solar eclipse, made no impression upon the plate, its shape being outlined only by the coronal light. Consequently, as the dark orb of the moon traveled across this luminous field, the image of the latter followed in the wake of the moon, gradually overlapping the outline of the moon as first impressed upon the sensitive-plate.

At mid-totality the altitude of the sun was 18.4 degrees, according to a table in the special eclipse supplement to the *American Ephemeris for 1925*—not by any means a high angle above the horizon; yet, the general luminosity of the atmosphere and the brightness of the corona were much greater than I had been led to expect. This, indeed, appeared to be the experience of most observers, including among others the *Scientific American* party at Easthampton, Long Island, which, according to reports, obtained photographs which showed surprisingly



FIGURES 2, 3 AND 4

WILLIAM S. DAVIS

large coronal streamers, some extending several times as far beyond the sun as the diameter of the latter. The same observers were also quoted as noting the light given out by the corona was nearly twice as brilliant as that of the full moon. On the other hand, scientific observers in Connecticut reported the light as being less brilliant than moonlight, and aerial observers stationed at high altitudes were quoted as stating that intense darkness prevailed during totality. These local variations were explained by Mr. Luyten of the Harvard Observatory in the course of an article which appeared in *The New York Times* as being due to atmospheric conditions, even a

slight haze, such as would be invisible to an observer from below, increasing the diffusion of the light and, in consequence, the general luminosity of the lower atmosphere. The presence of the snow also, without doubt, added to the apparent illumination of the landscape.

Figure 4 represents a stage of the partial phase after totality. This was made at 9.20 o'clock, exposure one second, with the lens working at an effective aperture of F/45 and capped by the ray-filter.

The negatives of the four exposures just described were developed by the tray-method in a hydrochinone developer which contained

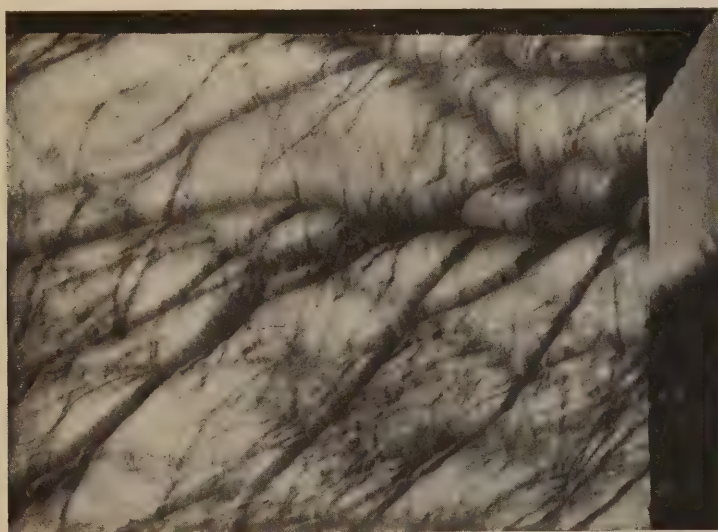


FIGURE 5

WILLIAM S. DAVIS

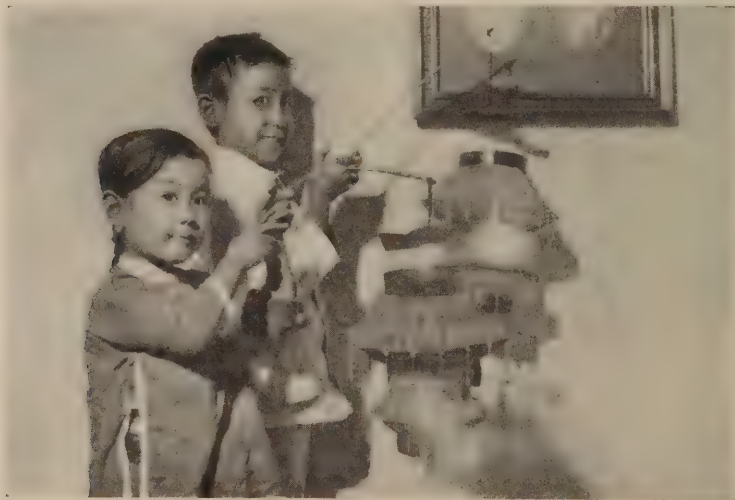
some bromide, the object being to obtain clean-cut contrasts: To obtain a fairly large image in the finished pictures, without resorting to the use of an enlarger every time a print was wanted, I made enlarged transparencies upon Hammer Slow plates from the original negatives of Figures 2, 3 and 4, getting a magnification of between six and seven diameters, and from these transparencies new negatives were made by contact-printing upon the same kind of plates.

Figure 5 gives an idea of the type of cast-shadows present when the sun had been reduced to the shape of a new moon during the period preceding totality, the crescent shape of the sun being repeated in the forms of the smaller shadows. The shadow-pattern shown was cast by tree-branches upon the side of a concrete building, and notwithstanding the fact that the sun was nearly covered at this period—some five minutes before the commencement of totality—there was enough light to permit visual focusing of the image upon the groundglass. For this subject I used the $3\frac{1}{4} \times 4\frac{1}{4}$ camera, stopped the lens to F/8 and gave an exposure of one second upon a Wratten panchromatic plate. The exposure proved ample to produce a negative of good density when the plate was developed in an ordinary metal-hydroquinone developer.

About fifteen seconds before totality I made an exposure upon a snow-covered foreground in an attempt to catch the elusive "shadow-bands" then flitting along. I gave a slow snap of $\frac{1}{5}$ second, because of the condition of the light, with lens-stop at F/6.3, using a panchro-

matic plate. Half-a-minute after the end of totality, the experiment was repeated; but because of better lighting the shutter was speeded up to $\frac{1}{25}$ second, using this time a Kodak film-pack film. Upon development no traces of the shadow-bands could be found in the image of either negative—evidently the shadows were moving too swiftly for the shutter-speeds necessarily employed—but to me the negatives were of some interest as indicating the degree of actinic power possessed by the light at the times mentioned, since the detail and density of each image showed the exposures to have been nearly correct.

By way of confirming the visual impression of many observers that an unexpected amount of luminosity prevailed during the period of totality, I include with my illustrations one from a negative made by my friend Mr. L. V. Richard, who had a camera set up near mine. The exposure was made during an early stage of totality on an orthonon plate, using a 6-inch lens at F/11. Time of exposure; 5 seconds. The negative received normal treatment in development and shows quite a remarkable amount of detail in the landscape, considering the shortness of the exposure and the conditions under which it was made. Even with snow on the ground a much longer exposure than the one named would be necessary upon a moonlight night to register any detail. Consequently, the only deduction one can draw is that in this instance, at least, the actinic power of the coronal light was very much greater than that of ordinary moonlight.



THE LANTERN

L. BENG GUATT



NUMBER ONE

BEN MASER

Photography Solves an Interesting Problem

BEN MASER

IN the possession of his descendants, is an oil-painting of John McMullan, eminent nineteenth century silversmith, by Joseph Ord. Recently these owners of the portrait discovered an old, musty Daguerreotype that appeared to be an exact copy of it. The image being reversed, and the detail rather muddy, positive identification was very difficult; so they took both canvas and plate to the curators at the Pennsylvania Museum in Philadelphia, for analysis.

An exact, color-true copy of the oil, that brought out shading and minute details, was made by the Museum's expert Photographer, Mr. C. C. Whitenack. A Panchromatic plate and medium strong filter were used. Photograph

Number One shows the result. Print Number Two is a reproduction of the Daguerreotype. To obtain detail in this, color-plate and filter were used, and the exposure made in an even light, with an anastigmat lens. Shadows barely visible in the original, are quite clear here. This duplicate was then copied on a stripping plate, which was printed from the reverse side so as to make the image coincide with that of the painting. Photograph Number Three shows this.

By carefully comparing both copies, differences were readily noticed; and it was apparent that McMullan was younger looking at the time the Daguerreotype was made than when the portrait was painted. If you will follow the prints minutely, you will notice this fact, and the little discrepancies like the difference in the



NUMBER TWO



BEN MASER

NUMBER THREE

curl of the hair at the back of the neck. Since the picture is such as to make it very doubtful that it could have been photographed from life by the Daguerreotype process, the conclusion drawn was that the canvas is probably a copy of a previous original, of which the plate is a facsimile. Ord executed the painting in 1850, so the Daguerreotype must have been made some time between 1840 and that date. At the speed

of the process in this period, it would have been impossible for a man to sit unmoving long enough to yield such a result as we have.

An extremely interesting problem, this. No doubt it would have taken all kinds of trouble and experts to trace these facts otherwise. Crafty Photography, through the eagle eye of a lens and the proper manipulation of light and material, has done it simply and conclusively.

Practical Kinematography

HERBERT C. MCKAY

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Chapter VI—Printing the Kinogram



HE principles of straight printing have already been explained in the first volume of this series, "Kinematography for the Amateur"; but there is fully as much manipulation possible in printing motion-picture film as there is in printing still-photographs.

The printing-machine used should have some light control which can be adjusted while the machine is in operation. If there is no such control, it may be added in two ways. One is to obtain an old studio-shutter with an aperture of two inches or more. This is placed between the shutter and the aperture of the printer, if possible; or just behind the shutter if necessary. In using a continuous printer, this shutter is placed just at the back of the aperture. This shutter is then connected by a rod or rod-and-bell crank so that the iris may be closed by pulling the rod, which extends through a small hole in the printing-machine case. Thus the amount of light admitted to the film is under mechanical control. The iris should not be so close that an iris-out effect is obtained.

Another, and more simple expedient, is to obtain a small, porcelain-base rheostat and connect it into the lamp-circuit. Then by adjusting it the lamp will burn more or less brilliantly, according to the adjustment of the rheostat. It must be remembered that the light loses actinic quality far more rapidly than it does visual luminosity, because as the rheostat is thrown into use, the lamp filament not only grows more dim, but also assumes a greater and greater hue of yellow and motion-picture positive film is very insensitive to yellow light.

In case it is discovered that a fade has been omitted which is necessary to the picture, it is not necessary to try to duplicate the film, nor

is it necessary for the amateur to try that most perplexing job, a chemical fade. The chemical fade is easily done in the large laboratories; but the amateur rarely obtains a uniform gradation with the little practice he gets.

In making printer-fades, remember that the underexposure of the negative has an effect corresponding to the overexposure of the print. In other words, while the camera fades out the light admitted to the negative until only clear film is obtained upon development, the printing must gradually overexpose until the positive is "burned up" and so produces a black film just as though it were printed at normal light under a gradually clearing negative.

The light must be so arranged that the normal light is considerably below the maximum brilliancy. Now run the film at normal light until the time arrives for the fade-out. Then gradually increase the brilliancy of the light until at the end of four or five feet the positive is "burned up", actinically speaking. Conversely for the fade-in, the light is started at maximum brilliancy and gradually decreased in intensity until the predetermined normal is reached, after which the scene is finished at that light. Many kinematographers who have no automatic dissolve on their cameras habitually use this method for fading as it relieves them of the trouble of a hand-fade, and also allows more latitude in selecting the proper time for the fade.

In like manner the printer is often used to obtain the curtain-effect, either vertical or horizontal, as this also relieves the operator from having to operate the curtain-dissolve while cranking. To use the curtain-dissolve in the printer it is necessary to make the corresponding masks. To do this the camera is filled with positive stock and focused upon an evenly

lighted white background. The lens is then thrown slightly out of focus so that the weave of the curtain or other texture is not shown. Now crank at normal speed while operating the curtain-dissolve device. It is well to give three or four times the normal exposure, *i.e.*, use F/4.5 or F/6.3 when the normal exposure calls for F/8 to F/16. This will "burn up" the exposed portions while the opaque leaves of the device will protect the rest of the film. The proper exposure is determined by trial. Too much overexposure will give halation which may or may not be desirable according to the taste of the operator.

When developed this film will start with a solid black frame, as it is a negative, and as the film progresses, the edges of the frame clear progressively until there is only a narrow band of black in the center of the frame. This grows smaller until it disappears and the frame is all clear.

When this film is dry it is placed in the printer and a corresponding mask made. When the film is started, both films should be punched together so that a registration-mark may be obtained. When developed this film will, of course, be just the reverse of the first, so that when superimposed, a solid black film appears. We shall call the original positive, film number one, and the print, film number two.

Now let us take the negative which we desire to print with a curtain-dissolve. We shall dissolve out, that is the picture will be obscured by opaque segments advancing progressively from the edges of the frame. At the frame where the dissolve should begin we place film number two between the negative and the aperture, leaving negative and positive stock in contact to ensure a sharp image. The frame is marked where the punched frame of film number two first comes into the aperture. The three films are now run through the printer. Film number two has thus obscured the scene progressively, but if developed at this stage the positive would show the scene gradually cut down but leaving the screen *white*. To avoid this, as soon as the film is run through with mask film number two, the positive stock only is rewound. Now mask film number one is inserted by matching the punch and the mark made when inserting mask film number two. The film is now run through the printer a second time. This time the black portion of the mask film protects the image from a second exposure, which would obscure it, while the outer portions of the frames, which have received no image, are darkened by exposure to the printing-light. It will be noticed that in the second run the negative is not used, for

if it were, the edges which should be printed black would receive an impression of the image, and the curtain-effect would appear to be semi-transparent. This effect might be used to advantage at some time. In like manner, circle-in and circle-out can be printed in, or any other moving mask. The dissolve-in is accomplished by using the same masks, turned end-for-end.

Now suppose that you were asked to film the tale from the Arabian Nights, "The Flight of the Magic Carpet". This film would show the carpet with the Prince and Princess upon it flying through the air. The novice would probably study himself ill and finish by calling for elaborate effects which would cost a small fortune and still be far from successful. The seasoned kinematographer would go about it with no unusual equipment and do it this way.

The first thing to be done would be to select the scene for the background. A scene should be selected which may be photographed while the assistant "pams" the tripod. Also there should be no immediate foreground to accent the circular effect. The ideal location for such a picture would be from a high tower. If a long-focus lens is used, and one with a consequently narrower angle, a shorter pam will give an illusion of a large amount of travel. However, a scenic background is obtained which moves across the film cyclorama fashion.

Then a pure white ground and background is erected and well lighted, so that no background detail will appear in the finished film. The camera is turned a quarter turn on the tripod so that the tilt sways it from side to side instead of up and down. Now tilt the camera a little and arrange your subjects.

A rug is spread upon the white ground, and boxes and other objects placed under it to make it appear wavy. The subjects are then placed upon this rug, and grasp the edges of the rug as though holding on. Now focus the camera and see that the tilt is so that the front end of the rug is somewhat higher than the back, but not much. Now expose the film, as you crank have an assistant rock the camera a very little by operating the tilt-crank. The movement should not exceed 10° in either direction from the vertical. When you tilt the camera to your right, supposing the subjects face your left, direct them to lean back, then as you tilt left, direct them to lean forward. Your direction should be such that the actors attempt to keep their bodies parallel to the vertical place of the film. They will probably respond with a jerky movement which is to be desired. When this film is developed it will show the rug with its occupants waving up and down while with



LITTLE ADVENTURERS

DR. K. KOIKE

each move of the rug the occupants try to maintain their balance.

Now we shall proceed to combine the films. The first thing to do is to print the film of the carpet. This should be greatly overprinted. This is developed and shows the carpet picture as a silhouette, all black, and without detail, upon a clear film background. Because of this necessary overprinting it is necessary to have the white background well lighted in making the negative so that the light will not strike through and gray the clear film.

This print is a blocking-out mask. Both it and its negative should carry registration-marks, so that subsequent printings may be in register. Thread the printer with the scene negative and between the negative and aperture, insert the *print* of the carpet negative. Make a registration-mark and print. Place the negative and mask at one side and rewind the positive stock. Register the carpet *negative* and print it on the positive stock. If the registration has been properly done the finished film will show a landscape passing across the screen, while suspended in the air, the rug and its occupants rock gently as though striking air-currents. For better illusion this rocking should be irregular. It will be seen from this example that a moving object may be photographed moving across the screen, or remaining on the screen while the landscape passes across the frame.

Suppose that you wished to show the progress of the carpet from the upper window of a castle. As this is a fairy tale the more fantastic the scene, the better it will be. Obtain a suitable illustration of a fairy castle and photograph it. Set this film aside. Next secure an articulated cardboard puppet of an ogre, such as may be found in children's cut-out toys. Photograph this against a white background just as you did the carpet, imparting motion as explained under "Stop Motion". Develop this film and set aside. Now set up on the castle, as at first, making sure by some registration-marks that it is just exactly in the same position as at first. Now place a mask in the mask-box which will obscure everything from the nearer window edge to the corresponding frame edge. With this mask in place photograph the carpet as in the first example, but pass so as to move them across the frame from the direction of the window across the frame and exiting at the opposite side.

Now start the printing. First print the castle negative with the dark prints of both ogre and carpet between it and the aperture. Lay aside the castle negative and carpet print. Run the positive stock through the printer again with the carpet negative, still using the ogre print; but in this case the ogre print lies behind the carpet negative. Finally run through with only the ogre negative and positive stock. Thus

three separate prints are made on one film. The mask blocked out the carpet so that it would not register until it passed the line of the closer edge of the window. Thus the carpet appears to fly out of a window in the castle, while in the foreground stands a huge ogre, towering above the castle, while the carpet flies through the air in the distance, passing behind him.

If more than three printing processes are to be used, it is best to make combination masks before printing, because four thicknesses of film is all that can be run through the printing machine with any satisfactory results. These masks are made in the same manner. For example in the above case: The ogre negative is used to make a dark masking-print. Now using the same film, print the dark carpet masking-print on the same film. Develop and a black masking-print will be obtained which shows motions of both elements. This combination mask is run with the castle scene. Then for the carpet print, a dark masking-print of the ogre will be necessary; but no separate mask of the carpet is needed. It will be noticed from this that the print is made in planes. Now suppose

that a four-plane picture is desired. This will call for a background with three separate moving units in planes number three, number two and foreground. The following is the procedure:

Make combination mask of foreground, No. 1, No. 2.

Make combination mask of foreground and No. 1.

Make mask of foreground.

Print background with triple mask.

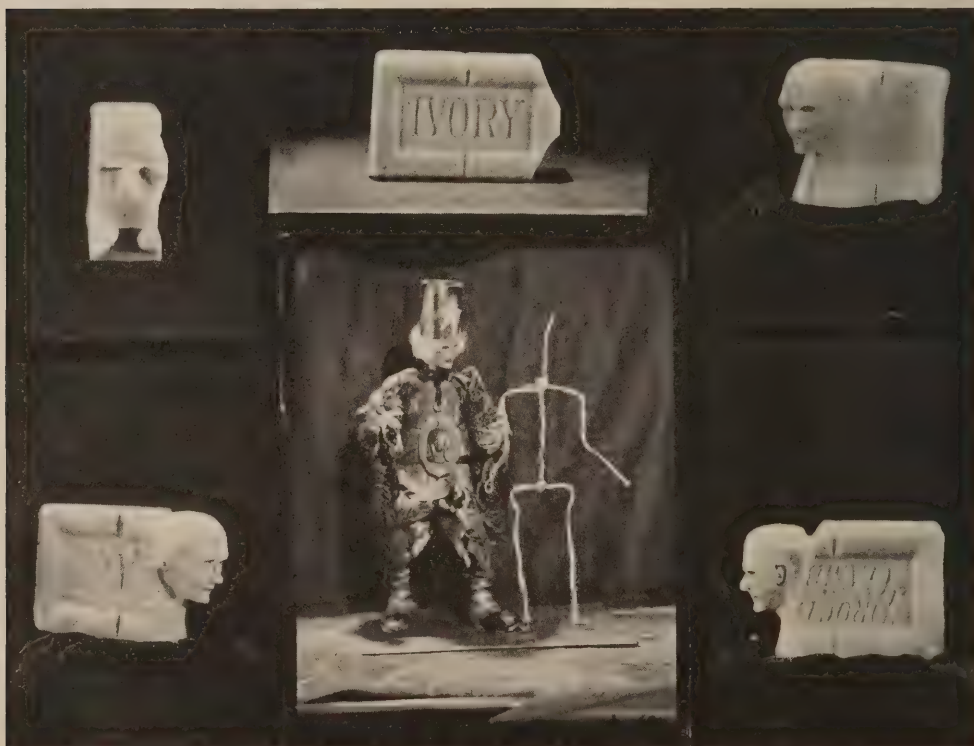
Print plane No. 2 with double mask.

Print plane No. 1 with foreground mask.

Print foreground.

The one great thing to see is that the black portions of both mask and superimposed prints are heavy enough to prevent light passing through. It will be seen that the number of superimposed prints is limited, for a small amount of light will necessarily pass through the black and after a time this will be great enough to fog the portions of the print which are so exposed time after time. Also, two different superimposed units is about all that will look well upon the screen.

(To be continued)



VARIOUS STAGES OF SOAP-DOLLS

LATIMER J. WILSON



THE LEADING CHARACTERS

LATIMER J. WILSON

A Home-made Movie Star

LATIMER J. WILSON

IN meeting a problem in the production of a motion-picture for use at a private entertainment an idea was stumbled upon which may be interesting to the average individual who likes to do things. The story of the scenario held many fantastic scenes, one of which required a grotesque "King of Goblins" to appear with one of the characters in the play. It was found that the Goblin king could be better manufactured than impersonated by a living actor. But how was the dummy to be made? That was the problem.

Then the idea of making the head of the puppet out of a cake of Ivory soap was suddenly thought of. At first a slanting plane was cut from the top of the cake at one end, to allow for the projection of the nose of the dummy. Another plane was cut from the bottom of the end to indicate the beginning of the chin and neck. The head was shaped at the top in the form of an oval with the broad part at the forehead. Another oval was cut down to represent the face, the broad part at the top of the forehead and the small part at the chin. The front of the face was then cut away from each side of the nose,

care being taken to keep the nose in the center of the face, in a straight vertical line. Then the eye-sockets were cut out in a horizontal line one third the way down from the top of the forehead. The tip of the nose measured another third, the nose occupying the exact middle third of the space from the top of the forehead to the chin. Only about an hour was required to shape the head of the "king."

The cutting at this stage was rough and angular and had to be smoothed down with the pen-knife. Finally, a small brush dipped in water was worked over the face until the angles were removed and the features were sufficiently smooth. Then the head was painted with yellow and white watercolors, the cheeks were tinted with red and the lips were painted red. The eyebrows and pupils of the eyes were painted black and cotton was glued on the head to represent white hair. If any other color had been desired the cotton could have been painted.

To make a figure move in motion-pictures it is necessary to change the positions of arms and legs and head when each separate picture is made. It is the rapid succession of pictures, each stopping one-sixteenth of a second, which

makes "motion" on the screen. Thus the position of the dummy in each picture had to be adjusted to represent the natural positions that would alter as the series of pictures were run off, the images being blended by the eye so that continuous movement would be seen.

In order to make the dummy "king" movable, his body was constructed of flexible wire. Beginning at the end of a strip of wire the first bending took place at the base of the spinal column. Here a right-angle bend was made to the right thigh. Then a downward bend brought the wire to the heel and a forward bending reached the toe where a loop was made. The wire was then carried back up the right leg, across the thigh to the spinal column, twisting it around the other wire and winding it around the spinal column and across to the left thigh. Then down the left leg in the same way that the right one was made, the wire being brought up again to the spinal column and on up to the base of the neck. It was then carried over to the right shoulder and down to the right wrist where another loop was made, and the wire was brought back up the arm to the shoulder and base of the neck and across to the left shoulder—then down the left arm, and back to the spinal column where it was wound around twice and cut off. That made the whole skeleton a continuous strip of wire as far as the base of the neck. The single wire protruding upward was stuck into

the soap-neck of the head, the latter being easily rotated upon it.

To keep the figure from appearing too bony, the wire-frame was wrapped with strips of cloth held firmly by narrow strips of adhesive tape such as surgeons use. The same sort of tape was used to make the shoes by wrapping strips around the wire loops and painting them afterward. The hands were made of surgeons' tape cut in the pattern of gloves and stuck to the end of the wrist loop of wire. The fingers could be easily adjusted to any position.

The foregoing may sound like a lesson in anatomy, but the details are presented so that anyone who would like to make one of these really attractive soap-dolls can do so.

Now for the use of the dummy in pictures. Two negative films were made. One was made of the young girl in the setting of the scene. The second was made of the dummy alone. Each picture of the dummy, and there are several hundred, showed him in an attitude which would harmonize with that of the living person to whom he was supposed to have appeared. The motion on the screen is perfect, and it is difficult to imagine that the Goblin king is not a real person. You see, the two separate films were printed upon the single strip of film that is used in the projection-machine. Thus in the finished picture the inanimate doll becomes a lifelike individual.



THE HERO AND THE LADIES

LATIMER J. WILSON

Questions and Answers in Darkroom-Procedure

ED. G. JERMAN

Part II

18. *How may oxidation with tank-development be retarded?*

Answer: By using a close-fitting, impervious float at all times when the solution is not in actual use, and by keeping the tank clean.

19. *What controls the life of a developing-solution?*

Answer: The amount of film-surface developed, temperature at which solution is kept, amount of exposure to air, freedom from contamination, accuracy of compounding, and the care in the selection of the quantity and quality of chemicals used.

20. *How long may a developing-solution be used?*

Answer: It may be used until its action becomes too slow, or until it produces a chemical stain.

21. *How may the condition of a developing-solution be determined?*

Answer: By the time required for proper development, by freedom from stain, and by its color.

22. *Why is it advisable to use the standard package form of developers?*

Answer: The use of the standard package usually ensures the proper quality and quantity of the chemicals required.

23. *Does the package developer deteriorate with age before being dissolved?*

Answer: Not if obtained from a reliable source, and stored in a dry place.

24. *What brand of developer should be used?*

Answer: The brand especially prepared for the films used.

25. *How may developing-tanks be cleaned?*

Answer: By the use of a chemical solvent, not by any abrasive material. Prepared tank-cleaners are available.

26. *In what manner should the film be placed in the developing-solution?*

Answer: The film should be rapidly lowered into the solution and then raised and lowered two or three times in order that air bubbles may be prevented.

27. *What is the function of the Hypo or fixing-solution?*

Answer: To dissolve out the unexposed and undeveloped Silver Bromide, leaving a permanent Silver Oxide image.

28. *What chemicals are used in a fixing-solution?*

Answer: There are several fixing-baths in use.

One of the more prominent formulæ contains the following: Sodium Hyposulphite, Sodium Sulphite, Potassium Chrome Alum, Sulphuric Acid, Water.

29. *What is the purpose of each of the chemicals?*

Answer: Sodium Hyposulphite is a solvent for Silver Bromide and is used to dissolve out the unexposed and undeveloped particles of Silver Bromide.

Sodium Sulphite is a preservative and is used to keep the solution in a stable condition.

Potassium Chrome Alum is an astringent and is used to harden or toughen the emulsion.

Sulphuric Acid is used to prevent the solution from becoming alkaline due to developer carried over by the film.

Water is the solvent used to hold the chemicals in solution.

30. *Should distilled water be used in making a fixing-solution?*

Answer: It is rarely necessary to use distilled water.

31. *At what temperature should the chemicals of the fixing-bath be put into solution?*

Answer: About 80° F.

32. *In what order should the chemicals be dissolved?*

Answer: In the order as listed, each being thoroughly dissolved before adding the next. When using standard package follow directions on the label.

33. *Is the quantity and quality of the chemicals used in the fixing-solution important?*

Answer: Yes. Any material variation in the quality or quantity of the chemicals used will result in an unbalanced condition.

34. *Why is it advisable to use the standard package form of fixing-solution?*

Answer: The use of the standard package usually ensures the proper quality and quantity of the chemicals.

35. *Does the package form of fixing-solution deteriorate with age before being dissolved?*

Answer: Very seldom, even if lumps form the quality is not seriously impaired.

36. *What brand of fixing-solution should be used?*

Answer: Any of the standard brands may be used with any of the present films.

37. *What controls the life of the fixing-solution?*

Answer: The amount of film-surface passing through the solution.

(To be continued)

A Paper-Holder for the Enlarging-Easel

E. H. BROWN



YOU would hardly attempt to place a plate or a film in your camera without a suitable plateholder. Not only would it be a nuisance, and somewhat uncertain; but it would be a tedious performance and undoubtedly ruin many negatives. Of course, with the present construction of cameras, it could hardly be done in any event; but in the early days of wet-plate photography it could be—and was done.

With the possible exception of the new vertical enlargers, the usual present-day enlarging-procedure is in a stage of development comparable to the wet-plate days of photography. Focusing and refocusing, pinning the paper to the easel with insecure pins or thumb-tacks, suffering loss of definition at the edges of the paper because of the well-known tendency of the paper to curl, centering the sensitive bromide paper in the dim image cast through the orange filter and, worst of all, smudging the paper with fingermarks; these are typical reasons why many amateurs avoid enlarging. It is costly and wasteful.

What has been needed has been a suitable "paper-holder" and the simple apparatus described below at once eliminates all the faults of the usual paper-pinning darkroom-acrobatics, and adds a very desirable feature to enlarging—speed. The paper-holder prevents fingermarks because the fingers need never touch the surface of the bromide paper, even accidentally. It enables the operator to have a white margin on the finished enlargement without troublesome attention to masking. The paper always lies flat to the very edges and thus ensures marginal definition. Enlarging to exact size is facilitated, because the size of the enlargement is predetermined by the size of the paper-holder. Speed is attained because fussy, awkward pins are done away with. The writer recently made eighteen 8 x 10 enlargements from a negative in twenty-five minutes by using this paper-holder. The necessity of placing the paper on the easel in the dim light afforded by the orange screen is eliminated, as the paper-holder itself is the guide. Two paper-holders are usually ample, viz., 5 x 7 and 8 x 10; but the holder is so inexpensive (costs about 5c. each), and so quickly made that as many sizes may be used as desired.

The accompanying diagram is drawn to scale for the 5 x 7 size. Larger sizes would be con-

structed on the same plan, the only difference being in the proportionate dimensions, which any one can work out for himself. "A" is simply a piece of cardboard $6\frac{1}{2} \times 8\frac{1}{2}$ inches—that which is packed in portrait or commercial film will do—with an opening $4\frac{3}{4} \times 6\frac{3}{4}$ inches. This forms a mask with a $\frac{7}{8}$ -inch border all around.

Now cut two strips of press-board—the slide from an old plateholder will serve admirably as it is just the right thickness— $\frac{3}{4} \times 6\frac{1}{2}$ inches, and one strip $\frac{3}{4} \times 5$ inches. These are indicated in the diagram by the broken lines, marked "B". Strips of cardboard will also serve for this; but the cardboard should be just a fraction thicker than the thickness of double-weight paper. Glue the two long strips to the sides of the mask, flush with the outside edges, as illustrated, and the short strip to the bottom of the mask. No strip is placed at the top. You now have a mask with a $\frac{1}{8}$ inch offset at sides and bottom.

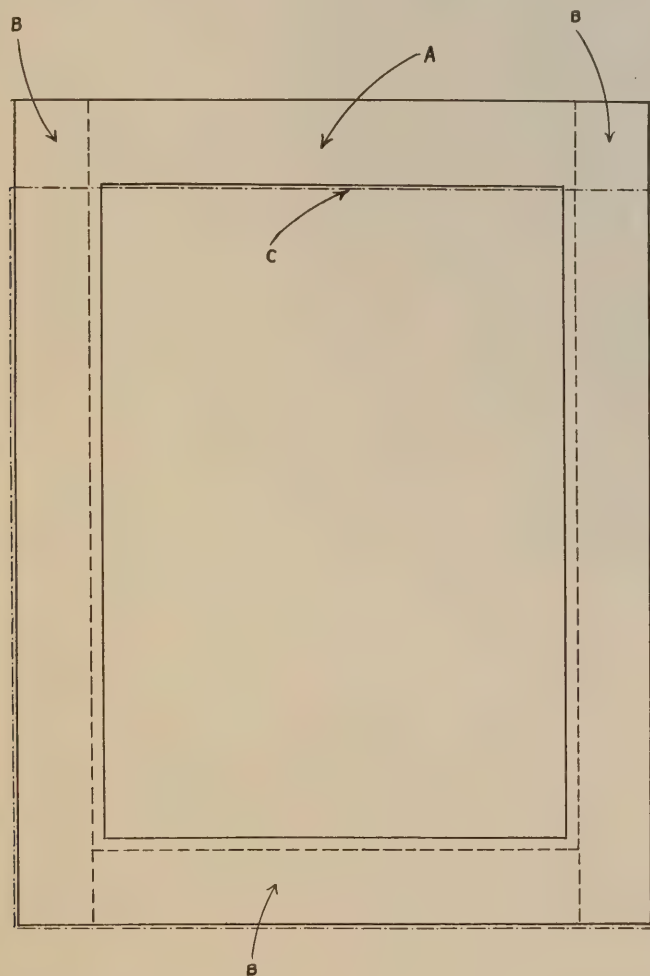
Now take a piece of Beaver or Compo Board—this is the part that may cost 5c.—and cut it to $6\frac{1}{2} \times 7\frac{1}{2}$ inches. The board is used to form the back of the paper holder and act as a stiffener. It is advisable, although not absolutely necessary, to cover one side of the Beaver Board with clean white paper, firmly and evenly glued all over, wrinkles being removed with a print-roller. The mask "A", after the strips "B" first glued have set, is glued strip side down on the paper-surfaced side of the Beaver Board. It will be noted that the mask projects $\frac{7}{8}$ of an inch above the top of the Beaver Board. The top of the Beaver Board is indicated by "C", the board being represented by the dot-and-dash line. For the sake of convenience in drawing, the Beaver Board is shown to be slightly larger than the mask. Actually it is the same width, and $7\frac{1}{2}$ inches long, as explained above.

When completed, the mask not only forms a $\frac{1}{8}$ inch white margin around the enlargement, but the projection or offset serves to hold the bromide paper firmly in position without curling. The enlarging-paper is easily slid—from the back of the holder at "C"—through the channel formed by the press-board strips. At the top, the enlarging-paper will project $\frac{1}{8}$ inch above the inside edge of the mask, thus forming the top part of the white border, and affording a finger-hold to remove the paper after exposure.

In use, a sheet of ordinary white paper—for focusing—is placed in the holder and the

whole placed against the easel and held securely by three push-pins, one at the bottom and one on each side. These pins are not thrust through the holder, but beside it. They are not removed, but allowed to remain as a guide for the holder. If the easel is marked, the pins may be put in the same place every time an enlargement of

method because, leaving the push-pins in place, it is simply a matter of changing the enlarging-paper in the holder. And, in making enlargements of odd sizes, it is still superior to the ordinary method because the paper is always sure to lie flat, finger-marks are avoided, and handling simplified.



(One-half original size)

FIGURE 1

E. H. BROWN

this size is made. After focusing, the holder is withdrawn from the push-pins, the focusing-paper replaced by the bromide paper, and the holder again placed on the easel, resting on and between the push-pins.

In making a number of enlargements from one negative, the ease and rapidity offered by the paper-holder are at once apparent. In making several enlargements of the same size from different negatives, it far excels the old

Once this paper-holder is tried out, no operator who uses the horizontal type of enlarging-apparatus will ever again be content to waste time, patience and material fussing with the ordinary method of enlarging.

[We are sure that Mr. Brown's helpful article will be much appreciated. Incidentally, he is the secretary of the Dallas Camera Club, Dallas, Texas, which is an active organisation working with and for its home city. EDITOR.]



FIGURE 1

J. G. PRATT

Photographing Monuments

J. G. PRATT



SOME time ago the writer was called upon to make photographs of a large collection of monuments in connection with an advertising-campaign conducted by a local granite company; and although the subject was not new, nevertheless, in making a specialty of it many interesting things were brought to light in the process of obtaining the best results.

The outfit used was a 5 x 7 view-camera fitted with a 6½-inch, an 8-inch, and a 10-inch lens; a tripod with a tilting-top; a grip filled with film-holders; a poncho and an umbrella. The two latter articles were found desirable because it was soon learned that cloudy days were almost an essential element, and if it rained slightly the work need not be interrupted as much better results could be then obtained than in even moderate sunshine.

A list was furnished of the numerous cemeteries, of the plots and sections, and the inscrip-

tions on the various stones, and the writer sallied forth in anticipation of an easy job. After walking around nearly a whole morning, however, and finding only three or four stones which could not be photographed because they required the evening light, it was decided to map out a plan of campaign. To avoid the difficulty of trying to find the veritable needle in the haystack, an employe of the company was designated to take me over the entire ground and point out each individual stone, and even he had considerable trouble to locate some of them himself. On this trip a note was made of those which required the morning light; those in the shade which could be photographed at any time; and others which should be left until late in the evening, and from then on the work was a pleasure.

The series of lenses of different focal length was of great assistance as in each case the most suitable viewpoint could be utilised. Some-

times it was necessary to park the camera close to the top of another stone and shoot downward; and again an unobstructed view could be gained only by crouching near the ground under a neighboring bush. In such cases if the rise and fall of the front board has not sufficient range to cover the subject, the camera can be pointed up or down sufficiently to help out; but the swingback should be manipulated so as

made so thin as to be difficult to hold back properly by shading.

For the most part, the exposures are short, a tenth of a second at stop F/16 being ample on a cloudy day; and, if the sun is shining, a quick snapshot is sufficient. In photographing monuments one is continually fighting extreme contrasts, for the chiseled and beveled portions reflect the light like a mirror; and where the

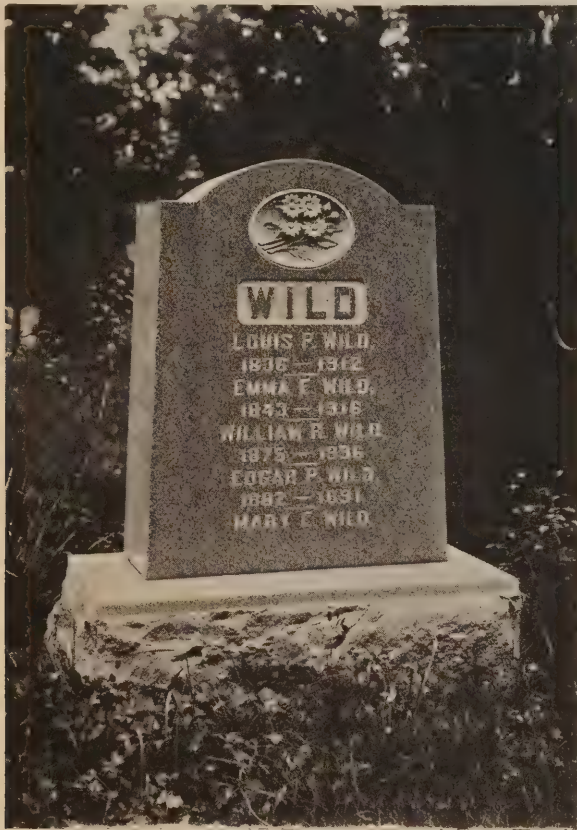


FIGURE 2

J. G. PRATT

to ensure the plate remaining vertical at all times in order not to distort the vertical lines of the subject.

In extreme cases where it is desirable to photograph a very high object, such as a building, and to cover a comparatively large plate with a lens of short focal length, it is a good plan to point the camera upward and not use the rising front at all, as otherwise, although the picture may appear all right on the groundglass, when it comes to making the print it will be found that the corners of the sky have been cut off or

regular development will answer well enough for cloudy-day pictures, those made in bright light will be all blocked up unless a weak developer is used, or one in which the carbonate is much reduced.

The following is a good all-around developer, and if this is used with only half the amount of carbonate called for it will be found excellent in avoiding contrast:

| | | |
|---------------|-----|--------|
| Water..... | 120 | ounces |
| Metol..... | 56 | grains |
| Sulphite..... | 2½ | ounces |



FIGURE 3

J. G. PRATT

| | |
|-------------------|------------|
| Hydroquinone..... | 240 grains |
| Carbonate..... | 3½ ounces |
| Bromide..... | 48 grains |

Normally, it is a six-minute developer for tanks at 70 degrees, and in a tray which is kept in motion to some extent, will give complete development in about four minutes. The use of films instead of plates is of course preferable as being less subject to halation.

Appropriate lighting is of prime importance in photographing anything, especially so with monuments as not only must one obtain the most pleasing rendition of the whole object; but the inscriptions must stand out clearly. It was generally found that standing a little to one side not only gave better depth and perspective to the monument, but brought out the raised or chiseled letters in best relief.

Soft paper, such as Azo grades Nos. 2 and 1, was found most suitable; but even then, in many instances, shading had to be resorted to in order to tone down the dense highlights. If using a printing-frame probably no explanation is neces-

sary. More careful work, however, can be accomplished in the writer's opinion with a printing-machine, although in most of the commercial printers the groundglass is too far down to give the proper short-scale diffusion required for tissue-paper shading. This can be remedied by taking a sheet of clear glass and propping up the corners with pieces of cork or otherwise so that the glass is somewhere between one-quarter and one-half an inch under the negative.

Now using thin, white tissue paper, cut out the portions to be brought out and register this on the clear glass-support directly under the negative. The tissue can also be blued over where desirable to hold back the shadows. Another piece of tissue can often be used to good advantage to lighten up the foreground; but this should be placed further down on the groundglass itself, in order to give a longer scale of diffusion.

Some of the stones were crowded together in the sales-room, and nothing could be done with

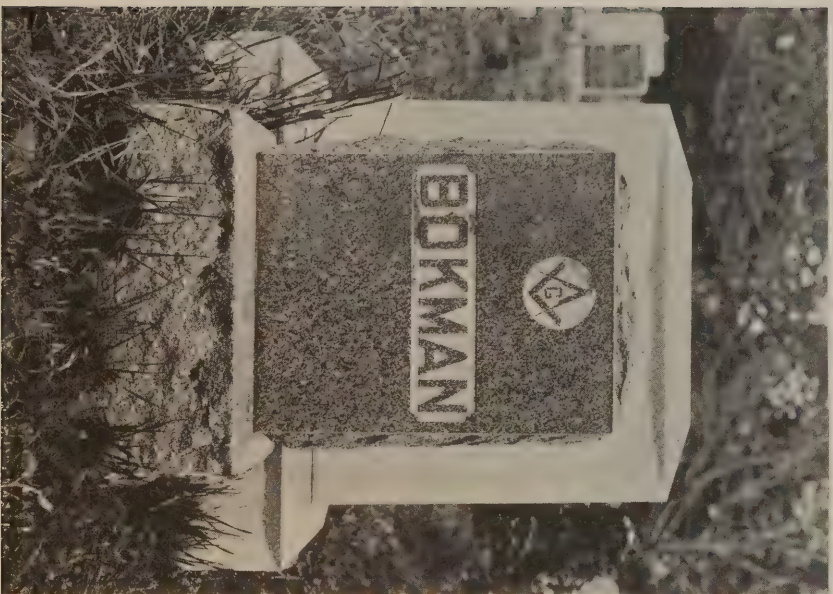


FIGURE 4



J. G. PRATT

FIGURE 5

these except to block out the entire background. In several instances, it was found that the only available position from which a stone could be photographed properly, to get the best lighting and perspective, and full detail in the inscriptions, was such that another and larger stone would show unpleasantly in the background, completely ruining the photograph for commercial purposes.

If sufficiently dark or free of highlights to permit a white background, excellent results can be obtained by blocking out the background around the stone, down to the foreground desired. The tops of blades of grass or flowers should also be gone around with the opaque. Then cut out a vignetting-mask, the bottom of which is not over a quarter of an inch larger than the base of the stone and place this under the negative on the clear glass-support. One or two trials will indicate the exact shape of the mask which is desirable, and the depth at which it should be placed in order to give the proper diffusion.

If the stone is light in color or shows extreme highlights in the beveled portions, the only recourse is to give it a black background, and although the process is rather tedious and complicated, if the work must be done it should be done well and the purchaser should be willing to pay for the extra trouble.

First etch out the background around the stone until it is practically clear glass, down to where you wish the foreground to begin. If you are using films, the problem is much simplified as you can cut to within an eighth of an inch with scissors or knife, and then on the retouching-frame, preferably with the aid of a reading-glass, etch clean around the outline of the stone.

The tops of the blades of grass do not matter here as they will not show.

Double printing is required to vignette into black, although the process is more tedious than difficult. Place the printing-paper on the negative and after making a pencil-line on same around the outline of the stone, give the proper exposure. Now cut out a mask to the shape of the stone—the top can be a little larger, although at the beginning of the foreground it should be exact. This is placed on top of the negative to prevent fogging, and the printing-paper registered according to the outline previously drawn on same. Another mask should now be laid on the clear glass-support to cover the entire lower portion of the picture up to where the foreground begins. This allows the light to vignette downward, merging the foreground into the jet black background. Now print again, giving sufficient exposure to blacken the beginning of the foreground. At first reading this may seem a terribly complicated process, although if each step is worked out as you go along, it will be found a very interesting experiment.

In estimating on work of this nature more moderate charges can be made than where one has to make a special visit for a single photograph. The writer charges four dollars to photograph a building or similar object, although if it is necessary to go to considerable trouble, such as climbing to the roof of a neighboring building, the price is increased accordingly. It was found in this instance, however, that as many as a dozen photographs could be made in an afternoon's work, and that a very fair profit could be made at one dollar each.



OLD FORT, HAVANA

EDWARD L. HARRISON

Indoor-Photography for the Amateur

WARWICK BARSE MILLER



ANY amateurs are wont to regard indoor-photography as a complicated and learned science to be handled only by experienced professionals. They eye it with a misgiving, wary glance, and give it a wide berth. Yet, they dive head over heels into the illusive art of portraiture and try to produce "artistic portraits" of all their family and trusting friends, with the result that they often become socially ostracised and cordially hated. Indoor-photography has hundreds of different objects: furniture, doors, windows, walls, angles, colors, and a whole gamut of things which seem to symbolise work and brain-storms. Portraiture, on the other hand, has nothing but a camera with a man or a woman in front of it. As a matter of fact indoor-photography requires only a little practical technique, but portraiture requires an inborn talent and judgment which can be developed only by long experience. And technique is always easier than talent. Let's see what a pleasant experiment indoor-photography is.

The first thing to do is to equip ourselves with some apparatus. Of course, you can make an interior with any kind of a camera. Even a Brownie will make a pretty good one if you give plenty of time and happen to get a good focus. But clear detail, correct composition, and color and lighting-effects are all important in producing a really pleasing interior, and these can be obtained only with a swing-back camera with a groundglass where you can see just how the picture is going to look. A swing-back is a frame at the back of the camera that holds the plate or film-pack and groundglass, and can be tilted upward or downward or to either side so that it can be kept parallel with the lens when the camera has to be tilted at some angle, as when photographing a tall building. Instead of tilting the camera, though, most plate-cameras have a rising-front, so that the lens may be raised or lowered or moved sideways while keeping the camera perfectly level. It can be easily seen that the plate and lens must be kept parallel with each other so that the lines in the picture will be parallel. These devices are necessary when it is desired to photograph the greater part of a ceiling or floor, or a stairway, or any view which cannot be made on a dead level. Many hand-cameras now have the rising-front and a groundglass; but they usually haven't the swing-back and

cannot be focused in close quarters. Anyway, a regular standard plate-camera is the only practical thing to have. And speaking of plates they are much easier to handle than films. You feel as though you had something in your hand, you can lay them aside easily in developing. You have to use all the film-pack at once or go through the nuisance of messing them trying to separate them in the darkroom, and they curl and wrinkle and jump all over the work table, calling forth bad language.

As to the kind of plate to use, a rapid backed orthochromatic variety is essential. The actinic power of light in room is about 50 to 75% less than it is outdoors, and hence it takes a rapid plate to absorb the objects. Backing is a dull non-reflecting chemical put on the back of a plate to prevent halating. Orthochromatic, of course, means the plate is sensitive to colors.

The lens is a very important factor. What is called a wide-angle lens is needed; that is, a lens which takes in a good deal at the sides—a wide spread. It can be seen that this is necessary for close quarters like interiors where you can't get back very far from the scene. All short-focus lenses are necessarily wide angle. Quick lenses and combination lenses are for the advanced worker and need not bother us here. A firm, wooden tripod and a focusing-cloth completes the equipment. My outfit eventually consisted of a No. V, 4 x 5 Korona camera fitted with an F/6.3 Velostigmat lens. The plate I used was the Standard Orthonon.

At first thought it would naturally seem that the most pleasing picture could be obtained by photographing rooms "as is"—as they are every day, and that the result would be natural and homey. This is true to a certain extent. But all rooms do not look well or give good effects in a picture when they are left "as is." We must arrange the furniture so that the room will be shown to its best advantage. A room cluttered up with a lot of miscellaneous furniture will never please the eye or artistic sense, unless it is a curiosity shop. This necessitates weeding out. If it is a parlor say, with a fireplace, piano, and table and lamp, leave only two or three chairs. Now try to put these chairs in some simple line-design, that is, in a curve that will carry the eye around at first glance. Maybe one at the end of the piano, one on each side of the fireplace, and one near the window. Never put them up to the table, if you want

formality. Let the bric-a-brac "junk" stay on the mantel, if it must. Far be it for me to blast New England traditions; but personally I would use a shovel and a bucket to them. In the dining-room put two chairs opposite each other at the table and the effect will be human and living without being "boarding-houseish." However, there is another side to this problem. For instance, in a study maybe you want to give an impression of informality and work, and in that case leave the chairs askew and a few books and papers around. With a little study and good taste you can get the effect you want.

I have perhaps gone into too many details, but now I return to the three basic principles. First, be careful not to have any big furniture near the camera or it will appear magnified in the print and out of proportion with everything else. In fact, a totally bare space should be left immediately in front, for it gives a compelling, dignified effect. Secondly, we often want to get the whole room in, but cannot get back far enough. The remedy is to move all the furniture and fixtures back farther towards the other end of the room, leaving each piece, however, in its same relative position, so that the result will be the same room on a reduced scale. Thirdly, always include more of the floor than the ceiling, otherwise the room will look grotesque. A fourth very important point is reflection from mirrors. We often never think of this, and the print shows a glass reflecting the camera or brilliant sunlight. It is best to stand in front of the lens and see that all mirrors are clear.

Lighting is the most ticklish part of the whole business, yet, it becomes very easy when you once get the hang of it. All windows included in the picture must be covered by a shade pulled down. Where there are not curtains covering the edges these shades must be pressed in against the window to shut out any cracks of light. It must be remembered that this outside light is 50 to 75% greater than the rest of the room, and the light in this room must be made as even as possible. The light shade is usually enough, and if pressed against the cross bars on the panes and if the dark shade is left half way up, the shadows will give the effect of a natural window. However, in a dark room where the sun is streaming brilliantly through a window, the dark shade or even both will not be too much. Now this of course takes a lot of light out of the room, and to make up for this every window, door and light not in the view must be used, within reason, of course. If a window is right on the edge of the view, care must be taken that the light won't stream in too strong and reflect on anything or give a Milky Way

effect. But in back of the camera let all the shades go to the top, and open the windows and take off the screens, if it is a dark room; for screens really shut out quite a little light and we need every bit we can get. Also open any doors letting in light, and even light the electric lights. And speaking of electric lights I've found that by leaving the light in a shaded lamp on in a picture it will often be just enough to brighten up a beautiful shade. Reflectors and powerful lights need not be bothered with, for the advantage of them can be substituted by ample exposure, which is the factor that determines the success or failure of the print.

Focusing is the most enjoyable part of the work, I think. You can see just how the picture will look and move the camera around at all different angles of the room and arrange things a half dozen times until you get the effect you want. I've spent a whole morning on one room doing this. That's the way to enjoy your work and get a good picture. First be sure and have a good wooden tripod high enough so you won't have to squat and kneel and break your back and crack your knee-joints. Then be sure and place it on a rug so it won't skid all over the hardwood floors. Rack the bellows back and forth until you see the scene well. But all is not in focus. The back is, the front isn't, and vice versa. How can we get both in focus? We can't on the ground-glass; but we can in the print. This is accomplished of course by using a very small stop, which, without going into mathematical details, brings all the lines together in such a fine passage that their visual lengths are rendered equal. I used F/22 all the time and found it to be the highest and the lowest stop at which I could get the best results. Anything less than that takes a pretty long exposure unless you have artificial lighting, and it is apt to give a dull, heavy, ill-lighted effect. However, in a light-colored room F/32 can be used excellently. The point at which the lens should be focused when the exposure is made—conjugate foci—is about half way from the lens to the end of the room, perhaps overlapping the second half. This will merely give an idea about where to focus. I never actually measure the distance. I just rack the lens back and forth until everything is in as equal focus as possible. Then I stop it down to F/22 and see how it looks. If anyone is a mathematical "fiend" he can find out how to determine this conjugate foci by algebra in Hasluck's "Book of Photography", page 360.

Now, after rolling this stumbling block to one side we can compose our picture, and in doing this I have found the following things important



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RALPH OSBORNE
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BRONX RIVER—AUTUMN

FRANK O'NEIL

to keep in mind. Is there any furniture looming up bigger than the rest? (You can easily see now how furniture too near would look in the print.) Examine both sides and top and bottom of the glass and see if everything you want is in. Are there any reflections in that mirror or picture? Are the window-shades pulled down? Can you see the fireplace or is something in the way, or is there anything being hidden? Is there an empty space in front? Does the effect please you? Sometimes, rooms are so dark that it is hard to make anything out on the glass, but electric lights or lamps can be placed in the dark corners until the focusing has been done. I'm writing from the standpoint of working only on bright days and am not concerned with artificial light. Personally I think much better results are obtained by using daylight with plenty of sun. One more point. In rooms with low ceilings, the tripod must not be raised to its full

height but only a little less than half the height of the room. Just see that it doesn't look as though you were making the picture from a landing or raised platform.

And now I come to exposure which I said determined the success or failure of the whole picture. Yet, there is little to be said about it. A little experience will tell more. The one important thing to keep in mind; and I think that it is the secret of good indoor-photography, is to give plenty of time. Much of it. Keep adding another minute. In other words over-expose rather than underexpose. This is difficult for us to learn to do at first, because we have been used to dealing in teeny fiftieths and hundredths of seconds, and now we have to educate ourselves for exposures of twenty minutes and half hours. A plate which has been overexposed five minutes can be reduced with no bother or detriment to the picture; and, many times, it



SISTERS

J. HERBERT SAUNDERS

need not be touched at all but merely given more time in printing. But a plate that has been underexposed five minutes is doomed. Nothing can save it for the simple reason that no intensifier can bring out something that isn't there.

I have divided rooms into four definite degrees of light intensity: 1—Very light. Sun-parlors, observatories, or any glassed-in rooms. Time exposures, that is, long ones, are impossible unless unnecessary trouble is resorted to in tacking unbleached muslin over all the windows to even the light. A better way is to photograph the room in the daytime at ordinary speeds of $1/25$ or $1/50$ and then leave the camera in exactly the same position 'till night and expose with flashlight. Oftentimes, you can get a pretty good picture by only a bulb exposure, if the woodwork and furniture are very white.

2—Light rooms such as bedrooms, white wainscoted and white-plastered rooms. These are more common, and require from fifteen to

twenty minutes at $F/22$, depending whether the sun is on their side or not. Nearer twenty minutes in general is always better.

3—Dark rooms, such as studies, libraries, drawing-rooms, halls, etc. Not dark to us, but photographically dark. Twenty-five to thirty minutes at $F/22$ is none too much for these, and a good thirty when there is much red in the room.

4—Very dark rooms, such as in number 3 where there are not many windows, or the windows are up high and small. It seems as though when you cover the few windows up it is too dark for any plate; but I've found that if you leave a rapid plate exposed long enough it will absorb all the details very clearly. 35 minutes is about right for these.

In reference to this classification two things should be observed. That class two and three are the most common in our homes; and that I have assumed that the amateur will make his pictures only on sunny days. On a bright day



ON GUARD

WILLIAM F. ANDERSON

without sun at least five to ten minutes should be added in each case. My advice to the beginner is to expose a plate under these times and then see for himself whether he needs more or less. There is no scientific means you can tell by. It comes only by a little experience and intuition.

The whole principle of developing indoor exposures is to let them develop very gradually. There are many gradations of contrast, and the problem is to bring out the detail in the darkest shadows and restraining the most brilliantly lighted parts. I overcame it very easily, however, by using a plate tank and mixing the ordinary solution of Eastman 4 x 5 tank developers, then pouring off about one half and filling it up again with water. I then left the plates in the solution at 70 F for 25 minutes. This weak solution gave plenty of opportunity for each part to develop. If you like tray-developing better, the same principle applies. Of course, there is a whole gamut of chemicals you can use to alter the action of developers.

In printing, as you probably know, this principle can be worked too. If the negative is harsh and contrasty, dilute the developer and raise the temperature a little, use soft paper; and, if you insist on being a long-coated scientific chemist, drop a pinch of potassium bromide in, but not too much unless you want the print to look like an ugly bruised spot. I find the Regular and Special Soft Eastman papers the best; but the softest, most pleasing gradations of tone can be obtained with the Artura Iris papers.

I have assumed in this article that the amateur has a plate-camera; but if he hasn't he must by no means think the game's hopeless with a popular film-camera. He can do more with a plate-camera; but for several years I used a Brownie Folding Camera and had excellent fun. Just see that everything is in the finder, measure the distance to the point I mentioned and set the foot-scale to correspond, and use the same stop and time and development.



"Shade Where Cattle Stand"

E. P. Tinkham

A Half Holiday

E. P. TINKHAM

ON a brief, unplanned vacation
From the daily task,
Better means of relaxation
Could I never ask
Than to idle by a river,
Lounge along its side,
Where the tree-reflections quiver
In its lazy tide.

Where the woodland greets the highway,
And the plowlands end,
Sloping path and winding byway
Riverward extend;
Wildflowers fleck, with wealth of color,
Open spaces green,
While in shady groves, the duller,
Softer tints are seen.

In the denser wood, I loiter.
Startled in their haunt,
Squirrels scurry, reconnoiter,
Courage gain, and vaunt.
Perched in sight, the showy flicker
Calls, while in the brush,
Timid, hidden by the thicker
Foliage, sings the thrush.

From a height, I view the valley,
Just above a ledge,
Then descend, and dally, dally
At the river's edge.
With their branches overspreading
Waters laving sand,
At the shallows, elms are shedding
Shade, where cattle stand.

Aimless but to find employment
For some leisure time,
And recount worthwhile enjoyment,
Is this rambling rhyme
Of an idler by a river,
Lounger at its side,
Where the tree-reflections quiver
In its lazy tide.



MAGELLANS OF TODAY

HONORABLE MENTION—MISCELLANEOUS COMPETITION

Y. MORINAGA



EDITORIAL



Preparing the Exhibition-Print

ALTHOUGH the attention of the amateur worker is frequently invited to the subject of complete fixation of negatives or prints, it must be admitted that carelessness in this step of photographic operations is widely prevalent. Although the importance of thorough fixation cannot be too strongly emphasised, there are preceding and succeeding operations that also demand the exercise of supreme care. Many workers imagine that so long as the print has been fixed thoroughly, the steps that immediately precede and follow this process need cause the worker little worry. But here he is seriously mistaken; for every step in making the print, even to attaching it to the mount, should be attended with intelligence and thoroughness.

Assuming that the darkroom-illuminant is trustworthy, the careful worker will compound and use the developer as directed by the maker of his printing-medium, observing, too, the temperature of the solution—60 to 70 degrees Fahrenheit. The preparation of the fixing-bath should proceed in accordance with the manufacturer's printed formula—pure water, pure chemicals, and mixed and dissolved in the order given. The stop-bath, where development is instantly arrested, and the print scientifically rinsed, should be used freely. The final washing may seem a purely mechanical operation, but it needs occasional inspection in view of possible obstacles or accidents. The drying of the print is only too frequently the cause of eventual disaster. Why? Simply because the indifferent or careless worker neglected to consider the quality of the blotters employed in the final step of the work. It is safe to say that most makes of blotting-paper contain chemicals that are prejudicial to the durability of the prospective salon-print. The conscientious worker should procure a standard, chemically pure, white blotter. He should also be sure that the print, in this the last stage of the work, has the advantage of pure air. This may seem unnecessary advice; but it should be remembered that framed enlargements are known to have been seriously affected by the presence of carbon monoxide gas (coal-gas), excessive heat and other insidious causes often to be found in old, neglected residences or in poorly constructed apartment-

houses. Precautions in this respect, during the process of drying the prints, may well engage the attention of the pictorialist who is eager to produce a print that shall be a credit to his skill and his beloved art.

The actually final stage of the print to be exhibited, or to be framed, is the mounting. It seems almost needless to mention the subject of a chemically pure adhesive; but indifference in this respect has caused the ruin of many a fine print. The wise worker will choose a medium of acknowledged purity and effectiveness. Chemical purity should also characterise the paper and mount to which the photographic print is to be attached, whether wholly or only by the corners or the upper edge. This is important.

During a long period of photographic activity, we have seen innumerable prints in various stages of disintegration. Although the ruin of many of them was caused by the poor quality of the printing-medium employed, carelessness in operations was responsible in most cases. We have before us, at this moment, a print of an attractive wood-interior by an estimable worker, which appeared in *PHOTO-ERA* about twelve years ago. Its tonal quality, originally, was a superb black; but the print has faded and assumed a uniformly yellowish cast. This condition, probably, was caused by the use of an exhausted fixing-bath or by incomplete elimination of the hypo. Another print that came under our observation, recently—a view of the cathedral of Mexico, made in 1907—was marred by whitish spots which appeared to owe their origin to hypo splashed on the moist print, or to drying the print on cloth or blotters which were contaminated locally with hypo. If necessary, the prints could be restored by bleaching them in a mixture of potassium permanganate and sodium chloride, and redeveloping in a diluted solution with an ordinary developer. In these days, therefore, when pictorial photography is taking a well-merited place among the fine arts, its devotees should exercise the highest technical skill in the performance of their work, so that there may be no room for apprehension or subsequent apologies. When the completed print, executed in whatever medium, shall have been submitted to the supreme requirements, the worker will be in a position to say, with pride and conviction, "This print is permanent."



ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for two years thereafter.

Awards—Advanced Competition

Subject—Miscellaneous

Closed February 28, 1925

First Prize: Walter E. Owen.

Second Prize: Walter Rutherford.

Third Prize: F. Y. Ogasawara.

Honorable Mention: Herbert J. Harper; Melvin C. Parrish; Jack De Biase; M. J. Osaki; Louis R. Murray; Francesco Tallarico; Dr. F. F. Sornberger; Frank O'Neil; A. J. Anderson; Arthur L. Richardson; John Van De Water; Duane P. Hotchkiss; Francis L. Bayle; A. L. Tracy; S. Hirano; William Gould; Stan. Warden; Cornelia Clarke; John H. Kemp, Jr.; H. Onishi; Arthur C. K. Hallock; Arthur R. Brown; Elliott H. Wendell; Mrs. Elsa B. Versfelt; Joseph Hamersky; U. Stephen Johnson; Kenneth McLeod, Jr.; Charles Clayton, Jr.; A. D. Blanchard; L. J. Creegan; Geo. W. Case; Wm. S. Davis; Eleanor F. Jones; Walter P. Bruning; Charles Ditchfield; Y. Morinaga; P. MacAdam; F. S. Dellenbaugh, Jr.; E. M. Child.

Subjects for Competition—1925

"Artificial Light Photographs." Closes May 31.

"Miscellaneous." Closes June 30.

"Front-Cover Illustrations." Closes July 31.

"Real Sunrise and Sunset Pictures." August 31.

"Wild and Cultivated Trees." Closes September 30.

"Miscellaneous." Closes October 31.

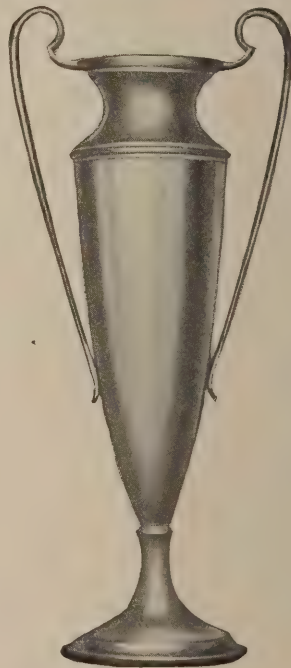


Photo-Era Prize-Cup



STUDY IN HIGH KEY
WALTER E. OWEN
FIRST PRIZE — MISCELLANEOUS COMPETITION



PATHS OF GLORY

WALTER RUTHERFORD

SECOND PRIZE—MISCELLANEOUS COMPETITION

Advanced Competition

THE subject, "Miscellaneous", brings out a good variety of work and also a variety of workers, some of whom do not, for one reason or another, enter the special subject competitions. This month's pictures are well assorted, from portraiture to still-life, showing some really "good stuff", as the artists like to say. "Study in High Key", page 281, the first prize award, shows fine technical and artistic strength. It is well spaced and harmonious in arrangement; the strongest accents coming in the face and head, as they should. The delineation of the profile and outline of the head against the white ground are especially well done. It requires skill in technique to relieve a light subject against white.

Data: Dull day in November, 3 P.M.; in studio; 8 x 10 view camera, with Wollensak Vesta Portrait lens, at F/6. Exposure 5 seconds on Eastman Super-speed Film; rodinal developer. Enlarged on Wellington Platino Thick Rough, amidol developed.

"Paths of Glory", above. The original of this, in a rich dark sepia, is a joy to behold. Mr. Rutherford does not say whether this was made from the ground or the air, but be that as it may, he surely seized upon the happy moment to make exposure. How fortunate the airplane at right happened to occupy that exact position, where it balances the whole picture, and how keen of perception was the photographer to appreciate it and make it his own. Note also the cloud in upper right corner, in half light, offsetting a similar mass in lower left. It would seem that nature does, at times, indeed very often, if we but have eyes to see, show many a perfect picture,

ready for the skilled camerist to record, for future enjoyment and profit. Many, such as this one, never repeat.

Data: September; R. B. Auto Graflex 4 x 5; Berthiot Olor Anastigmat, focus 5.7 inches, at F/8; 1/235 sec. exposure Wratten Panchromatic; pyro-soda. Enlarged on Wellington C. C. Rough, sepia toned.

"Notan", page 283. This title, interpreted, means the distribution of the masses of light and dark, with relation to the whole picture-space. This is a choice example, and we note with æsthetic pleasure, the means employed by the artist to accomplish his desired result, even using his signature as a part of the design. A little masterpiece.

Data: Made in studio; June P.M., 5 x 7 camera, Vitax lens 13 inch, at F/16. Eastman Superspeed Film; 15 seconds, in artificial light. Pyro tank-developed. Printed on Vitava K. by projection.

"A Corner of the Garden", page 284. Another "notan" design. Observe the chicks placed together with the only other highlight, viz. the nozzle, and opposed to the darkest mass in the watercan; the hose forming pleasing curves to connect the whole. Not a jarring note in the pattern.

Data: Good light, 3 P.M.; 4 x 5 Graflex, Tessar lens at F/6.3. Exposure 1/195 second on E. K. Superspeed Film, Glycin developer. Print on Veltex.

E. H. WASHBURN.

A Foggy One

At the photo-counter of a country-drugstore: "Do you really replace films that turn out to be foggy?"

Salesman: "My dear madam, we do it every day."



NOTAN

F. Y. OGASAWARA

THIRD PRIZE—MISCELLANEOUS COMPETITION

Something to Think About from Mr. Blacar

APRIL 1, 1925.

MY DEAR MR. BEARDSLEY:

In hand-camera work the question often comes up as to how long one can hold the camera still enough for safety. Of course, there is a great difference in people's nerves and no two alike; but there is one point that I have never seen referred to, and that is the jarring of the camera by operating the release.

I called at a doctor's a few days ago and he syringed my throat and when he shut his fingers on the bulb he jerked his arm and his whole body, and nearly pushed me out of the chair, and hurt me like blazes when all that he should have done was to close his fingers on the bulb. It is so with many camerists, from nervousness, carelessness, or from never having given thought to the matter. How about pulling the trigger on a rifle or a revolver? Do you pull it with the finger, the arm, or with the whole body?

Some might take it for granted that they could not jar a camera by using the wire-release; but if they would look the matter over carefully and experiment with an unfilled camera, I think that they would find that they could jar it considerably. Some operate the release for snapshots by a gentle, steady pressure

'till the shutter *works*; some by a quick nervous jerk and let go instantly; some by a quick hard jerk and *hold* the *pressure* some little time after.

When the wire-release hangs loose from the shutter, it seems as if the camera could not be jarred by it; but a little experimenting will show that if the release is pressed and *held*, it becomes like a very stiff, hard cord and that the camera can be moved by *pushing* the release as well as by *pulling* it; especially, if the release is a short one, as most are.

I think that for one who makes pictures seriously, a few hours devoted to the study of the shutter-release would be a paying proposition.

The movement of a camera that spoils the picture must of course be *after* the *shutter* has begun to open, and just when the release-cord is at its *hardest* and *stiffest*, when it would be the likeliest to move the camera if much force were used in pressing the button.

A good test-plan would appear to be to let some friend hold the camera and see if he can hold it still while you *violently* work the release. Also, to place the camera on a cushion made of several soft handkerchiefs crumpled up so as to make a light pile and see if working the release would jar it or not.

I think that the whole subject is worth serious study



A CORNER OF THE GARDEN

H. ONISHI

HONORABLE MENTION—MISCELLANEOUS COMPETITION

and I think that this handkerchief test would wake one up to the importance of it; for with the release-cord stiffened up by pressure, the camera can be pushed and led around like a little dog on a wire.

Even when using a *long* wire-release it must stiffen its whole length to work the shutter and a little study will show that it is not such a perfect thing as it is thought to be; and, as to the *short* ones as commonly used, they are a very crude, coarse affair, as tests will show.

WILLIAM H. BLACAR.

P.S.—How would it do for you to hold the camera in your hands *with your eyes shut* while I operate the release in various ways and with varying force, and for you to do the judging by the *feel*?

Certainly you would not know when I pressed the button unless it jarred the camera to some extent.



To Clear Negatives or Diapositives

A SIMPLE bath that keeps well, to clear negatives or diapositives, can be prepared with 15 grammes alum, 15 grammes iron sulphate, and 15 grammes citric acid, dissolved in 350 cc. water. The negative or diapositive is first soaked in water to soften the gelatine-coat and is then immersed in the clearing-bath for about 20 minutes. If on coming from this bath the plate appears too weak, it may be strengthened with sublimate or with ammonia, first washing it carefully. This formula has also been found excellent to eliminate yellow fog on diapositives and for spots or strong fog on negatives.—Exchange.

Making Good Quality Ground-glass

GROUND-GLASS in photography is useful in many ways and the making of it worth while, if a good quality can be produced. The instructions usually provide for rubbing together two sheets of glass between which emery-powder and water is sprinkled as an abrasive. Right, as far as it goes; but better results can be had by proceeding as follows: The grains of emery-powder differ considerably in size and, used as above, the coarse grains will regulate the fineness of the ground-glass produced. Take two glass tumblers and fill one with water. Add to the water a quantity of emery-powder and stir vigorously with a spoon. If closely observed it will be seen that the larger and heavier grains will now settle rapidly while the smaller ones trail on behind. Consequently, after a few moments, turn most of the water into the second glass without disturbing the sediment in the first. Allow the second glass to stand until settled, turn off the water and the resulting powder or rather mud, freed of the coarse grains, will produce an excellent ground-glass, suitable for most purposes. The above proceeding can be repeated, if desired, with a very fine mud-ground effect; but it takes considerably longer to work the glass into prime condition. For grinding, if a sheet of wet glass is laid upon a folded newspaper it will not slip about when work begins and, instead of using a second glass of the same size, a small piece of plate-glass, about two inches square, is more convenient to handle.

CHARLES A. HARRIS.

AMATEUR PHOTOGRAPHER (showing pictures)—“Don't you think it is about time I exhibited something?”

CANDID FRIEND—“Yes, a little talent.”—Exchange.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



SILHOUETTE-STUDY

WILLIAM LUDLUM

Advanced Competition Miscellaneous Ending July 31, 1925

IN popular parlance we started something with our last Miscellaneous Competition. It was the largest of its kind in recent PHOTO-ERA history. Many well-known men and women pictorialists contributed exceptional prints and the jury was placed in a difficult position to make the final awards. Now we are to have another similar competition. Certainly, the number of entries in the last Miscellaneous Competition indicated that the majority of our readers like to have no specified subject. Yet, isn't it a good thing, once in a while, to work for a definite objective?

Really, there is not much for me to say with regard to preparing prints for the coming Miscellaneous Competition. Any subject is eligible whether it be a portrait, marine, landscape, indoor genre or airplane view. In fact any picture which the maker believes

represents some of his or her best work is eligible to this competition. However, let me add a word of caution. Do not consider this competition as a sort of dumping-ground for prints which seem to fit in nowhere else or have been considered not quite up to standard. Let every contributor remember that it is always best to be true to oneself. That is, send in a print because it is honest work, whatever the subject may be; but let not this competition be a temptation to "look around for something to send in by way of a print". Aim just as high and as accurately at the Miscellaneous Competition as though everything depended upon it. If all will do that, the next competition will be a record breaker in number of entries and in the quality of the work submitted. It will be no small honor to win a prize or Honorable Mention in such a competition. However, first aim high with good work and let the prize awards take care of themselves. Awards never take the place of real happiness at true accomplishment.

A. H. BEARDSLEY.



BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are not regular subscribers will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are already subscribers will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of limited experience with practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous

Closed February 28, 1925

First Prize: Burton Slade, Jr.

Second Prize: S. Horino.

Honorable Mention: C. A. Pierce; Lieut. Alfred E. McKenney; G. Douglas Smith; Paul C. Miller; Glen Gehrke; L. G. Wells; James A. Bell; S. B. Priest; Irving Sparks.

Don't Be Just a Snapshooter

Soon there will be the annual exodus to the country or seashore for week-end and longer vacations. A camera is a necessary part of the holiday-equipment, and rightly so. However, there are comparatively few vacationists who use their cameras to the best advantage. In short, they make no effort to get out of the snapshooter class. They are satisfied with pictures of members of their party, the hotel or camp, a few hurriedly made views and photo-finishing as done by the corner drug-store. They care little for composition, technique or the selection of good subject-material. In fact, often they fail to make even good record photographs. There are thousands of such pictures made every summer and there are thousands of albums filled with them. To be sure, the manufacturers and dealers are benefitted by the snapshooter, so far as the sale of plates, films and paper is concerned; but is all this really good for the art and science of photography?

Perhaps the reader will feel inclined to remind me that to insist upon strict attention to all pictorial rules would have a tendency to deter the beginner from making any pictures at all. Let me hasten to say that this is not the purpose of this little article. Nevertheless, I do hope to show the advisability of getting out of the snapshooter class; for, after all, there will be more lasting satisfaction in photography, if it is done. It is not necessary for me to remind my readers that there are few things which are a greater bore than to be compelled to sit down with some snapshooter and have him go through his collection of pictures. Usually, most of them are of persons who are total strangers and who will soon be forgotten by the snapshooter himself. Then, too, they are hurriedly made with the result that there is something wrong with the exposure, focusing and viewpoint. No attention is usually paid to the matter of lighting and most of the faces are so shaded by hats that the features are barely recognisable; or hats are removed in a glaring sun and all squint painfully, as they look straight at the camera. Moreover, the "group" is usually lined up without any regard for arrangement. As a result, many times, some one's head, foot or arm is not included in the picture. Certainly it should not be too much to expect the beginner to give some thought to these important factors in photographic success. After all, who will be the gainer and whose will be the real satisfaction of accomplishment?

As I have said so often, it is to be regretted that photography was put in the "add-water-and-serve"



CHILDHOOD DAYS

BURTON SLADE, JR.

FIRST PRIZE—BEGINNERS' COMPETITION

class of human activities. By that I mean, it is to be regretted that photography was simplified to such a point that the man on the street now assumes that there is nothing to it and that anyone can make good pictures by simply pressing the bulb. I am heartily in favor of popularising photography so that young and old may enjoy it and be benefitted by it. However, let it not be assumed that good pictures can be made without honest effort and without playing the game. It simply isn't done. Witness the thousands of really valueless prints that are made, much to the boredom of good friends who hesitate to tell the maker how poor his prints are, when compared to first-class amateur work. To be sure, it is not a welcome task to call a spade a spade, especially when it may hurt the feelings of a friend; but heroic treatment is needed to stop the tremendous waste of material and to help these same good friends get really worthwhile pictures.

Those who follow these articles, month after month, must know that my one thought is to stimulate and to help every reader to make the most of photography. By so doing he will get greater pleasure and profit from it as a hobby or business. It is for this same reason that I urge my readers, in this article, to get out of the snapshooter class. It is nothing to be proud of—this being just a snapshooter. Instead, make the effort to become an amateur photographer. This means virtually the mastery of one's camera and the ability to make good pictures under all reasonable conditions.

What interests me is that golf clubs, tennis clubs, bowling clubs and rifle clubs make a beginner toe the mark before he is allowed to compete in first-class matches. Not always so in photography. Hence, the large snapshooter class, even in some camera clubs.

The tremendous emphasis placed on the simplicity of modern photography has virtually deadened the interest of those who are perfectly willing to work long and earnestly to become proficient in tennis or golf. It is human nature to desire to excel in whatever is considered somewhat difficult to do well. If snapshooters were made to realise that good photography requires just as much effort, and more, than it does to be able to play a first-class game of tennis, there would be less waste of photo-material and more good pictures in thousands of albums. Those of my readers who are earning money with their cameras know that good workmanship is required. They have found that it is a satisfaction and an asset to make good pictures. If the snapshooter will just open his eyes, look at his poor prints and resolve this coming summer to get out of the snapshooter class of tourists and vacationists and be a real amateur photographer, he will find a new photography and enjoy a heap o' satisfaction.

A. H. BEARDSLEY.

Beginners' Competition

"CHILDHOOD DAYS", this page. Very good indeed for a novice. The human interest is so marked that we forget the distracting background, to a certain extent. The poses appear unstudied and natural. The little girl's knees could be darkened somewhat to the advantage of her face. The expression of mischief on the boy's face and his posture, leave us in no doubt as to his intent.

Data: Brownie 2 A, with portrait attachment. Exposed $\frac{1}{2}$ second at 2 P.M., in April, in bright light. Kodak Film; Pyro developed.



A PART OF THE PASTURE

S. HORINO

SECOND PRIZE—BEGINNERS' COMPETITION

"A Part of the Pasture", above. A creditable little landscape, with fine lighting and atmosphere. The foreground is a bit too long. Trimming it to just under the bush brings the sky-line down, thus emphasising the sky, which is too good to play second to an uninteresting bit of foreground. The cow is rather prominent, but saves the picture by breaking up a straight line which would otherwise spoil the whole.

Data: Graflex, 4 x 5, Tessar 1 c. at F/4.5. Exposed 1/80 second at 4 P.M., on E. K. Roll Film; tank developed. Iris E smooth print.

E. H. WASHBURN.

The Struggling Amateur

WE have all heard about the struggling seaman, the unsuccessful artist and the great authors who have been turned down so many times; but what about the photographer? Some photographic magazines set aside a few pages entitled "The Amateur and his Troubles"; but the question is, "Are they really his troubles?" The answer will be found in the "Negative."

It is my desire to tell the world that the saying:—"Big things (Enlargements) come hard" is true. Success is 1% Inspiration and 99% Perspiration. I received my 1% some time ago, while watching a friend developing his own films. From then on I began to struggle for my own results.

Life is filled with ups and downs; yes, so is photography. The ups are when your good pictures receive honorable mention and are hung "up" for exhibition in the Salons. These ups are few. But the downs. How many negatives have I thrown in the waste-box. I made *one* good negative once which happened to

be a glass plate, so I dropped it. Yes! Photography is certainly filled with "downs". The amateur also has his smiles and frowns. Occasionally, while doing some work in my darkroom, I've had a negative develop in the required time, with plenty of detail, good contrast; and, when I had it fixed perfectly, washed and dried, I had in my possession a perfect negative representing the original scene in every detail. Did I smile? I'll say I did.

But more often we have our frowns, especially in the darkroom. There's where we find we have over or underexposed the negative or we have a beautiful picture of our friend with his head cut off or the composition is bad or the plate is fogged or the developer won't work and a hundred other disappointments.

But alas! Photography is a great hobby and we can't get along without it. We keep in good spirits for the "shadows" are confined to the darkroom in our own privacy, and the "highlights" occur frequently when we exhibit some of the good work and receive well merited praise.

ELMER P. TREVORS.

DIAPHRAGM-OPENING.—In no case should the "utilisable" opening of the diaphragm exceed the "mechanical" diameter of the lenses measured directly.

Exchange.

FILTERING GOLD-SOLUTIONS.—Solutions of gold-chloride should never be filtered through paper, because that may cause decomposition of the gold-salt. The filtering should be done through a tampon of asbestos or "spun" glass.—Exchange.



OUR CONTRIBUTING CRITICS



OLD TOWER, HAVANA E. L. HARRISON
THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

If the picture "Old Tower, Havana", is of the type I believe it to be, then it is a success. I say this despite that fact that some of the most fundamental rules of photography have been ignored. My theory is that the print is a travel-record. The photographer came across a very interesting belfry and, no doubt due to restricting circumstances, was compelled to tilt his camera in order to include the main object of the picture, *i.e.*, the top of the tower. Also the light is almost directly behind the camera; but no doubt making the picture was a case of now or never.

In consideration of the above assumptions, it would not be fair to give such factitious advice as the camera should not be tilted, a more diagonal lighting should be selected, the telegraph-pole and shadow are objectionable, etc.

As to the print at hand, it has many good points and its defects are of such a nature as can be readily corrected. The tones of the picture are very good and the sky is nicely rendered. The lighting is at such an angle as to give depth to the picture although broader shadows would have been an advantage.

The tilting of the camera is not very great, but, unfortunately, it is accentuated by the receding lines of the tower. This, however, can be readily overcome by enlarging with the paper-holder tilted so as to make the vertical lines parallel. A very small portion should be trimmed from the right side of the picture, just enough to remove the telegraph pole. Also the bottom of the picture should be trimmed to the top of the shadow of the pole or, better still, the shadow should be spotted out.

SAMUEL B. PRIEST.

THE picture is splendid as a record for a photographic album, the photographer knowing the immediate surroundings which will be indelibly printed on



THE STRAY CAT

RALPH F. RHODES

YOUR CRITICISM IS INVITED

his mind, should he be observant. What about anyone else, though? I myself, do not know the height of the tower nor the appearance of the immediate surroundings.

Yet, what if the photographer was not able to get farther away from his object! Well, he will then have done his best.

To photograph the tower correctly the photographer should have put more distance between the camera and subject. He should have used a camera with a rising-front, placed an object whose size is known to everyone, near the tower, included some foreground and nearby buildings. This routine would have much improved this picture and would have eliminated the tilting camera so prominent in this case.

JAMES BELL.

Old Tower, Havana

GREAT is the pow'r of suggestion

That a picture has on the thought.

Old Tower, my friend, to our notion,

The following views has brought:

When we gaze upon this photo fair,

We say, "Where are we at"?

Is it a bird's eye view or the view of a cat?

As for us, we're up in the air.

Our necks are strained and our eyes are slanted

Upward to behold the wall.

Hold your breath! It seems so canted

It must be ready to fall.

On thin air is it really resting?

We see no foundation sound;

To support the heavy belfry tow'ring

Why not some solid ground?

Terra firma never seems so sweet

As it does after pond'ring the view

We long to see the busy street

And the life of Havana, too.

ARTHUR MARBLE.



Numbering the Plateholders

NUMBERING the plateholders has been the means, on more than one occasion, of saving life or, any way, plates. If the slide, after the first exposure, happens not to be reversed and this holder is placed among several others, how is one to know which is the holder to use or which plate in the holder should be developed? As an additional safeguard all the holders should be numbered consecutively allowing two numbers to each holder and then make a practise of using them in numerical order. That is, if the holder is numbered three and four always use number three first. The numbers can also be used to identify plates for various purposes such as special treatment in the developer or when more than one kind of plate or film is carried. The numbers in ink or whatever is used will hold more permanently if a section of the varnish is first scraped.

CHARLES A. HARRIS.

Overexposed Bromide Prints

MAY be utilised by placing in a solution of alum and acid fixing-bath. In this the prints take a brown color and the strength is slowly reduced. The fixing-bath should be constantly stirred when adding the pulverised alum, in order to avoid a deleterious precipitation of sulphur.—Exchange.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



A TOTAL eclipse of the sun is always an event of world-wide scientific interest; and large sums of money are spent in preparation for successful observations; astronomers and other scientists travelling thousands of miles in order to be present in the path of totality, for the purpose of photographing it in all its phases and noting the circumstances and occurrences connected with the great phenomenon. The eclipse which took place on January 24, 1925, was no exception to this rule, but on the contrary was of unusual interest to the general public, on account of its path covering a larger area of populated land in a climate where observation was simple, than any eclipse previously recorded.

Owing to this circumstance, it is probably true that a record number of photographs were made. Particularly was this true among amateur photographers and it is estimated that thousands of exposures were made by this fraternity. So that it is fitting that PHOTO-ERA MAGAZINE should publish good examples. A number were reproduced in the March issue and in the present issue several more, coupled with an extremely interesting article from the pen of Wm. S. Davis.

The frontispiece, "Approaching Totality", is a brilliant example of conditions just previous to the thrilling occurrence. A careful study reveals many interesting features, such as the regular pattern of the waves of the ocean's surface when seen from a great height, and the cloud-shadow on the water.

Data: Taken from the dirigible U.S.S. Los Angeles, one mile high, 20 miles off Montauk Point, Long Island, N.Y. a few minutes before total eclipse. Clouds over sun are three to four miles high. Small fragments of clouds casting shadow on water are one-half mile high and were penetrated by dirigible in ascent. Photograph by Watson Davis, managing editor *Science Service*, representing all press associations on eclipse flight, January 24, 1925. Also member of U.S. Naval Observatory Expedition Board, for which flight was taken. Roll-Film Ica; Carl Zeiss II B. Tessar; 1/25 second; Kodak film.

"Landscape During Totality", page 250, is of interest as showing the general appearance of the landscape in the weird twilight which existed at the time. Data in Mr. Davis's article.

The three prints by Mr. Davis are worth studying; Figure 1, page 251, being the only one with pictorial tendency. Those on page 253 are of fine technical quality, and scientific interest. Data of all three are in the article.

"The Lantern", page 254. This little flashlight shows good exposure and soft lights and shadows frequently lacking in this kind of work. The arrangement is good, making a not unpleasing pattern on the white background. The expression on the "kiddies'" faces is very cute and lends human interest.

Data: Made in Singapore, India, with Butcher Carbine camera; Aldis lens of 5.3 inches—focus, at F/6. About 30 grains of Johnson's Flash-powder was used. The film was Amalgamated Photo Manufacturers. Illingworth bromide paper.

Copies of portraits on pages 255 and 256 are good examples of photography when used as the "handmaid of art". Data in article.

"Little Adventurers", page 259, is what we designate

a "record snapshot", yet the group of young pals on the raft is interesting and forms the basis of a better result by judiciously trimming away the useless material on all sides. I suggest $1\frac{1}{8}$ inches from left; $\frac{5}{8}$ from top; $\frac{3}{8}$ from right and $\frac{1}{2}$ from bottom. The remainder should enlarge perfectly, as the print indicates a perfect negative.

Data: 3a Kodak; F/6.3 Tessar lens, at full open; exposure 1/100 on roll film; Pyro developer. Time of year, August at 3 P.M., bright sunlight.

"The Leading Characters" and "The Hero and The Ladies", on pages 261 and 262, are singularly lifelike, and one is disappointed to discover that they are only soap-dolls. The print on page 260 shows "how it is done". Data in article.

Again we have a splendid technical set of photographs on pages 266 to 269 illustrating Mr. Pratt's article, in which the data are given.

"Old Fort, Havana", page 270, is of record value only, showing the type of buildings used in that place. No data.

The portrait "W. H. C. Pillsbury", page 273, is that of the genial and versatile president of the Boston Y. M. C. Union Camera Club. This is good pictorially, but not, to my mind, a just portrait of Mr. Pillsbury, who is so full of smiles and good nature. The stern expression about the mouth and jaw are unlike him. Possibly the camera was too low.

Data: Six seconds exposure, on Eastman D. C. Ortho plate; Voigtlander Portrait-Euryscope lens at F/5; Amidol developer; Platinum Velour enlargement from 4 x 5. Korona 4 x 5 view camera. Made in Union Camera Club Studio; artificial light.

"Bronx River, Autumn", page 274. A very pleasing and well composed landscape with deliciously soft sunlighting. The low-placed horizon shows a varying outline and gives an opportunity for a fine sky, which has been well done. The river is hardly well enough delineated to make the title, but that is a minor matter. I wish the bits of foliage at right against the sky could be eliminated. They are too attractive, or rather distracting. I prefer less diffusion of focus.

Data: Graflex, 4 x 5, Kalosat lens at F/5.5; 5-times filter. Exposure 1/10 second in October at 4 P.M. on Agfa Chromo Isolar plate, M. Q. developer. Print on Vitava Athena C., M. Q. developed.

"Sisters", page 275. Again Mr. Saunders makes us glad with this charming little picture. The feeling of motherly care on the part of older girl and dependence of the younger are full of human appeal. The soft delineation and harmony of tone are characteristic of this artist's work. No data.

"On Guard", page 276, is one of those record pictures of unflinching interest, which we all like to enjoy. Mr. Collie-dog is happy in his job, as can be seen by his broad smile of satisfaction. He is proud to be on guard. "Don't you think baby and I are about the best ever?" he seems to say. The background at top is rather spotty but the lights and darks in the central figures compel attention. No data.

"Where Cattle Stand", page 277. The general composition is so good and subject so attractive, that we regret a more harmonious and truthful print has not been made. Less contrast would bring out all the

qualities desirable in this, and add immeasurably to its poetic quality, making it more truly in keeping with the delightful verses.

Data: Seneca View 8 x 10; Convertible Symmetrical of 12½ inches focus; F/16, 1/25 second; Cramer Inst. Iso; very bright light in July at 11 A.M.; Elon-Hydro developer. Contact print from part of 8 x 10 negative, on Artura non-curling paper.

"Magellans of Today", page 278. Were it not for the unusual strength of the second prize picture, this would be a hard competitor for prize honors. It is extremely well spaced and the lights and darks are well handled. Although a fine picture in all respects it lacks the quality of originality so necessary to capture a major award. Technically, it is an achievement, being made with a telephoto lens on hand camera. If anybody thinks it is easy, let him try.

Data: April 3 P.M.; bright light; 4 x 5 Telescopic Graflex, Plaubel Tele-Peonar lens at 5 magnifications, giving an equivalent focus of 25 inches. Exposure 1/850 second at F/15 on Eastman Superspeed Film; pyro-soda. Print on Vitava Rapid Black J.

E. H. WASHBURN.



A Pocket-Camera I Recommend— Especially to the Novice

As an amateur, I have been fairly active in the pursuit of photography for over twenty years, and have owned during that period, several kinds of cameras. Of late years, however, I have found it rather difficult to give camera-work as much attention as I would like—partly owing to lack of spare time, on account of other business; and, what was perhaps more important, I also found that I lacked inclination to "lug" around a camera and fittings weighing over twenty pounds, particularly when the temperature here in Australia soars up towards a hundred.

Therefore, some time back, I looked about for a compact hand-camera, very light in weight and small in bulk. The instrument had to be large enough to produce a print suitable for halftone-reproduction without enlargement; but the negatives would have to be of good enough quality to permit enlargement, if I so desired.

None of the plate-cameras on the market furnished what I needed. I am somewhat of a "plate-waster", and like to be able to make as many exposures as I feel inclined on any subject; for the reason that frequently, after I have obtained what I consider the best point of view, a quick change of the figures—if it is a group—will perhaps give a very much better rendering of the subject. And, for this to happen just when I have exposed my very first plate, is somewhat exasperating, to say the least of it.

There are very, very few hand-cameras with which one can make more than twelve exposures in a day without refilling, and, really, twelve is not very many to make, if one has a quick eye for suitable subjects.

I had done a bit of work with films several years ago, but was not altogether satisfied with the results I then obtained. They were not so fast as plates, and I found the latter more dependable. Yet, as far as I could see, nothing but a film-camera would do all that I wanted.

Eventually I decided on the No. 3 A Folding Pocket Kodak which you probably know is postcard size—3¼ x 5½ inches—an ideal shape for most subjects. I found that in its leather-case, filled with a ten-

exposure film, it weighed only three pounds, and that I could easily carry another three rolls in my coat-pocket, and thus have forty exposures available should I feel inclined to be very extravagant.

The first thing that I did was to spend some time gaining a thorough knowledge of the instrument. Removing the back, I cut a piece of groundglass to size and was able to check the focusing-scale, which I found absolutely correct. I experimented, too, with the rising-and-falling front and the shutter at its various speeds 'till I felt that I was as familiar with the "new baby", as with the older ones.

I might remark, in passing, that the cleverly-written and illustrated booklet which accompanied the camera covered every point that a novice could possibly need, and if followed with care it would be next to impossible for anyone to make a mistake in using the camera.

Then, I filled the camera with a ten-exposure spool and started out to give the camera and film a thoroughly practical test in some cases, on very difficult subjects.

I found the Kodak N. C. film to be absolutely dependable, very rapid—faster than most extra-rapid plates; quite free of halation—that bug-bear of plate-workers—and giving beautifully graded negatives without the least thought in development, except to put the exposed film in the Kodak Tank and leave it in the weak developer recommended, for twenty minutes. And you know, the development can be done at any time, anywhere—day or night. Then, too, this film is isochromatic and naturally gives a much-improved rendering of all subjects which contain color. Can one, therefore, imagine anything more convenient or satisfactory?

In conclusion, I can recommend this pocket-camera highly to anyone—especially the novice—for as I said before, by following the simple instructions enclosed with the camera, carefully and well, he cannot possibly go wrong, and will, I'm sure, at the same time, be more than satisfied with the results obtained in the photograph, whatever the subject may be.

PERCY B. PRYOR.

How to Make Enlarging-Trays

To those who did not get the enlarging-trays so much desired at Christmas time, the following method may appeal, as it did to me:

Take a piece of beaver-board, or other unfinished wall-board, about three inches larger each way than it is desired the tray shall be. Rub well with paraffin wax and then pass over it a flat-iron hot enough to melt the wax. This makes the board non-absorbent. Now take some pieces of inch-square pine or other soft wood and treat in like manner. Nail the strips around the edges of the board. Close the joints with wax and a hot soldering copper.

You now have a tray that will answer every purpose for developing or fixing, but inasmuch as it will not stand boiling water, it is well to put some marking on each to indicate its use and use it for that purpose only. Painting or staining the outside of the wood before putting on the wax is a good method, using a different color for trays to be employed for different purposes.

F. A. CROCKETT.

Artificial Light

"You say it's all off between Jack and his new girl? Why, he told me she was the light of his life."

"I guess he must have meant a flashlight."

Exchange.



ON THE GROUNDGLASS

WILFRED A. FRENCH



Dust-free Cameras

It is remarkable how few cameras in use by amateurs are free of dust. When someone hands me a camera, for examination, as the alleged cause of defective pictures, I always look for the presence of dust, and usually find it. It is rare, indeed, that the front-surface of the lens is not covered with a layer of dust. If a considerable quantity has settled there, or perhaps on the rear-surface, it is enough to obscure the photographic image and cause dim or foggy pictures. Yes; the guilty camerist had read PHOTO-ERA's oft-repeated recommendations to give his camera a good spring-cleaning when taking it from the shelf where it has lain during the winter-months. After that, he was care-free, but the camera did not remain dust-free. To be sure, most camerists carry their cameras of the pocket-type in sole leather-cases for protection; but when in actual use, the camera is carried by the handle, in the open, particularly in city-streets where all manner of dust is flying about. The lens being unprotected, it will collect some of this dust, which will also find its way, somehow, into the interior of the camera.

Investigating the matter a little further, I discovered that it is possible for dust to reach the camera through the carrying-case if it does not shut tightly. One day, last summer, I examined the pocket-camera of a caller from the West, who told me that, when traveling, he always kept his camera, ready for immediate use, on the seat beside him, or hanging from a hook above his head. To our mutual astonishment, we discovered that coal-dust had settled on the lens and had also found its way into the interior of the camera. The empty camera-case, which had been lying in the rack, overhead, contained dust and cinders. After a little reflection, I suggested that camera-case be supplemented by a thin, close-fitting suède-cover, easily made by a tailor, if not by a member of the family. This would afford ample protection to the camera while carried in the pocket. At the proper moment, this suède-cover can be quickly slipped off, put back in the pocket, without bulging it. When needed, it can be easily slipped on again, and the camera replaced in its leather case. Several months later, the camerist in question wrote me from his western home that the suède cover had been made—he neglected to state by whom—and had created a sensation among the members of his camera-club to whom he had shown it. It is probable that this thin, neat, soft, attractive-looking camera-cover, fashioned by loving hands, served as a welcome Christmas-gift bestowed upon certain camerists on the Pacific Coast.

A commercial article approximating the home-made suède-cover is marketed by the Ica people. It is made of similar material, of an agreeable, light color, and closes tightly. The opening resembles a lady's hand-bag—having two metal rims at the top. It is closed by means of two small metal-balls that are snapped together. It looks like a dust-proof device, but, like the suède-cover, offers little protection to the camera if it should be dropped on hard ground or receive a hard blow. The commercial case or cover is made only for pocket-cameras.

Postal Cards and Postcards

A LONG time ago, deeming this term "Postal Card" a little awkward, and thinking that I could improve upon it, I coined the word "postcard." Other persons undoubtedly had the same thought, for the use of this simplified word became general. So I applied the term indiscriminately to the government "Postal Card," to the private mailing-card and to the picture-postcard. Now, however—and since the private "postcard" and the picture-postcard are regarded by the government as first-class mail-matter, the same as a sealed letter—we all are obliged to discriminate in our designations, and to call the regular government one-cent card by its official name, "Postal Card", and the others (souvenir-cards privately printed) "Postcards." The latter require two cents postage, whereas the government Postal Card has its regular postage, one cent, already printed thereon. If, however, "the plain printed cards do not bear the words Post Card or Private Mailing-Card and do not conform to the required size, viz., 3 9/16 by 5 9/16, and contain no writing other than the address, they may be mailed for 1½ cents instead of the new two-cent rate which applies to private mailing-cards and post cards." If sent abroad, the Postcard requires no additional postage, whereas the government (one-cent) Postal Card requires the addition of a one-cent stamp, as heretofore. The Editors of PHOTO-ERA will be careful, from now on, to distinguish properly between Postal Cards and Postcards. Inasmuch, as the Post Office Department does not seem to recognise the single word, postcard, or even the compound word, post-card, and prefers the term "Post Card," the Editors and, doubtless, many other patriotic and native-born Americans will continue to use the simplified and logical spelling, viz. postcard.



Those Punsters

WHEN at St. Augustine, last February, and standing in front of the Ponce de Leon Hotel, I noticed a couple of tourists making snapshots of the magnificent structure. Said one to the other, "Here's a fine shot of the Ponce (the short for Ponce de Leon)!" "Ponce?", remarked the other. "What do you mean by Ponce?" "Why," came the quick reply, Ponce is the short for Pension, or boarding-house."



Help!

THE following advertising-gem appeared in a recent issue of a Boston suburban weekly, whose editor did not take the trouble to help the advertiser in writing the copy:

"Invalid wants to loan wheel-chair. Unable to buy one. Address No. 12248, Record Office."



Local Intensification

NEGATIVE-REDUCTION by means of the ferricyanide-hypo or cyanide-iodine solution applied locally with a camel-hair mop or tuft of cotton has long been a commonplace of everyday practice, but comparatively few workers resort to local intensification, which in its way is quite as useful. The reason for this, continues *The British Journal*, is probably that nine people out of ten use one or other of the two-step processes, such as mercury and ammonia or chromium, when it is, of course, impossible to judge of the degree of density which will be obtained until it is too late. With a one-step method, such as the use of a mercuric iodide solution, local intensification becomes quite easy. The procedure is exactly the same as for reduction; the increase of density is visible all the time, so that it can be stopped at any stage. There is no risk of staining, even if a trace of hypo is left in the film; but fixing must, of course, be thorough. The surface-color of the image is changed to a creamy color where it has been treated, but this is not visible upon looking through the negative.

Development-Fog

To a correspondent who complained of foggy negatives when tank-development was used, *La Photo. pour Tous* replied as follows: "It matters little whether the negatives are good if the prints are satisfactory. Relative failure is inevitable, for the plates always have a latent fog due to various causes, which will readily appear when any plate, no matter what its make, is developed without having been exposed, or when any negative is developed over long. The use of a dark-room-light not entirely free of actinic rays accentuates this fog. To these causes is added underexposure, the fog it produces being often colored. We do not think it is sufficient to modify the mode of development to enable one to escape the various influences which we have just explained. It is especially necessary to avoid fogging in the darkroom, either when filling the plate-holders or when developing, and to use a developer possessing sufficient activity to give a satisfactory negative in a normal length of time, in order to avoid under-exposure fog."

Slight Reduction of Bromide Prints

For foggy bromide prints the ordinary reducers for plates are not suitable, as they work too intensively and are apt to injure the halftones. For that reason recourse may be had to one of the following methods:

1. Mix equal parts of solutions of copper-sulphate and sodium-hyposulphite, 1 to 500, and immerse the print in this until the fog disappears.

2. Add to 600 cc. of a concentrated solution of sodium-hyposulphite 6 cc. of potassium iodide and bathe the prints in it.

3. Take about a 3 per-cent. solution of iron-chloride and lay the prints in this, stirring them constantly. A slow, regular and easily-controlled reduction takes place. Wash prints well after reducing. *Camera, Zurich.*

New Periscope Device for Foiling Bank Robbers

A NEW weapon has been placed in the hands of the forces of law and order in the fight against crime and criminals.

Although developed, like the tear-bomb, in the World War, the new weapon is devoted to defensive rather than offensive warfare. It is a periscope by means of which policemen or other observers may obtain from the sidewalk a comprehensive view of vaults which are situated beneath the street-level.

The new device has just been installed in the new bank-building of the Portland, Me., Savings-Bank by its inventor, Walter G. Wolfe, of 7 Crystal Street, Greenwood. Mr. Wolfe already possesses a dozen optical patents and is considered one of the pioneer experimenters in research-work among prominent oculists of the country. He is secretary of the Pinkham & Smith Company, prescription oculists of Boston.

The periscope is the last word in bank protection, and fills a long-felt want, for while the offices of banks are always well illuminated, and in full view, the vital spots, the vaults, are invariably out of sight.

By means of the new device, a view is obtained by looking through a peephole in a bronze plate set in the masonry, and an optical system, consisting of prisms and lenses, extending downward and turning numerous corners, reveals the whole of the front doors of the safety-vault. As a result, no one can approach the vault-doors unobserved, and, should the light be extinguished, an investigation would be made.

White Spots on Developed Prints

If neither air-bubbles nor grease is the cause of such spots, they are perhaps produced by tiny particles of metal that are nearly always to be found in the center of the spots. They can be readily recognised if the paper is embedded in paraffine and a fine cut made with a microtome, permitting examination with a microscope. They will be found by chemical reaction to be copper. The formation of the spot must be caused by electro-chemical reaction in the moist emulsion which leads to a partial deposit of the copper by the separate silver and the formation of bromide of copper. Experiments based on this point of view have shown that spots may actually be formed in this way and it is very probable that small particles of copper get into the raw paper when passing between the bronze cylinders of the calendering machine.

Camera, (Switz.).

Warm Purple Tones on Developing-Papers

AN exchange recommends, after bleaching in any of the ordinary bleachers, redeveloping in a pyro-developer made up as follows: Water 500 cc., sodium-sulphite 30 grammes, potassium metabisulphite 1 gramme, pyro 3 grammes, potassium carbonate (dry) 15 grammes.



THE STEREPHOTOGRAPHER



Stereo-Autochromes

AUTOCHROME stereos may be easily made on two small plates, eliminating the loss from breaking or scratching when cutting, and because smaller plates may be used, the cost may be reduced. The writer uses a 5 x 7 camera and a home-made kit to hold two $2\frac{1}{4} \times 3\frac{1}{4}$ plates.

Take a piece of the heavy pressboard from the inside of a 5 x 7 Kodak film-pack and a piece of the thinner pressboard from the back. In the heavy piece cut two openings large enough for a $2\frac{1}{4} \times 3\frac{1}{4}$ plate to fit easily, but not loosely. These holes should have the short sides parallel to the long side of the kit and their centers equally distant from the center of the kit. The distance between centers of the holes should be equal to the separation of the lenses, center to center.

Cut the thin piece about one-half inch shorter than the thick piece and mount the thin one on the thick, so that it centers. Mounting in a dry-mounting press is an excellent method; but glue should work equally well if the kit is kept under pressure for a day or two. Next, cut openings through the thin piece, leaving about an eighth-inch margin all around; that is, for a $2\frac{1}{4} \times 3\frac{1}{4}$ plate the opening would be 2×3 inches. Fill the kits with the thin side out. The writer has had no trouble with the plates falling out, although no fasteners are used.

EMMETT K. EMSLIE.

On Viewing Stereo-Positives

How many of you are able to view a stereoscopic slide without a stereoscope and yet obtain the illusion of depth and proper perspective? I believe this trick of the eyes can be mastered by anyone, whose eyes are even nearly equal in viewing-power. It is a matter of concentration, chiefly, and insistence upon seeing what doesn't exist.

It is hard to explain just how to go about it; but I believe the following will do: Hold a slide about six inches in front of the eyes and gaze at it intently. Slowly move it away from the eyes and you will notice instead of one dark mass, two such masses, representing the two pictures of the slide. Continue moving it away from the eyes, all the time gazing intently, in a sort of cross-eyed manner, such as one must contrive to look at anything very close to the eyes. At this time, there should be visible not two but *three* squares of black. The third square or the middle square, is of course an illusion, and not really existing; but is evidence that the eyes are about to see stereoscopically without a stereoscope. As the slide is moved still further, slowly, the blurred masses in the center square, should become sharp and take on natural appearance. Now the gaze must be concentrated on the center view even more intently, and as the slide is slowly moved back, the stereoscopic illusion should become noticeable. If not at first, after the detail is sharp and plainly recognisable, the slide should be moved slowly back and forth, over a short distance, say a half inch, until the stereoscopic relief is apparent.

Then the slide can be viewed for some time without eye-strain, as long as the gaze is still concentrated on the center square. To let the eyes wander to one of the end squares will destroy the illusion and require more concentration, in order to see stereoscopically again.

Of the various sizes, I can see the 6 x 13 cm. easiest. That is because the 6 x 13 size is most natural for the human eye. I am able to see it at a distance of about 10 inches, while with the 4.5 x 10.7 mm. I have to hold the slide fifteen inches away. With the American standard size, $3\frac{1}{2} \times 7$ inches, there is considerable eye-strain, and I have to hold it over two feet away, which distance overbalances the advantage that might be derived from viewing the larger print.

This trick—which is only a trick and never of real practical value—will hardly cause manufacturers of stereoscopes to cease their production, for the prints appear relatively small and unsatisfactory and the eye-strain is not pleasing. But for a casual inspection of a few slides, when no one has a stereoscope handy, the trick will be well worth mastering.

CHARLES FRANCIS HAMILTON.

Simple Adapters for Stereoscopic Transparencies

SHOULD an enthusiast in stereo-photography, equipped with a medium size outfit, acquire, by exchange or otherwise, stereo-views of smaller sizes, it is a simple matter to construct adapters with which the smaller may be enjoyed along with the larger views within the same stereoscope.

Stereoscopic transparencies of the 4.5 x 10.7 mm., the 6 x 13 cm. and the 9 x 14 cm. have been successfully exhibited within a stereoscope designed for the latter size with no adjustments other than simple cardboard adapters of the following description:

On a 9 x 14 cm. piece of stout but not thick paper—heavyweight cover stock—cut out a carefully centered opening slightly less than the size of the smaller stereo. For 6 x 13 cm. views this opening will approximate 5.2 x 12.5 cm.; the 4.5 x 10.7 mm. will require an opening 3.8 x 9.8 cm. or if preferred, two openings 3.8 x 4 cm. with 1.8 cm. space between.

A 9 x 14 cm. piece of cardboard no thicker than the unbound stereo-transparency must then be cut with a carefully centered opening sufficiently large to accommodate the stereo without forcing same into the opening. In adapting the 6 x 13 cm. stereo to the 9 x 14 cm. size, a very narrow strip of cardboard is left on the extreme ends; however, this is quite sufficient since it will later be strengthened in binding to a cover-glass. Paste the cut out cover paper and cardboard together. Lay the small, unbound stereoscopic transparency into its cardboard opening with film side up and upon it lay a clean 9 x 14 cm. cover-glass. Bind with lantern-slide binder and you have uniform stereoscopic transparencies no thicker than ordinary lantern-slides which, though the actual views may vary greatly, will work uniformly in the same stereoscope.

F. L. GOLL.



THE AMATEUR KINEMATOGRAPHER

HERBERT C. MCKAY



The Amateur Kinematographer

I HAVE just received a letter from Mr. Walter D. Kerst of Jersey City. Mr. Kerst has had an iris fitted to his camera as well as a mask-box. He inquires concerning the use of the graduated filter with the kiné camera.

It should be borne in mind that the motion-picture is but a refined still-picture. Almost all of those elements which go to make a beautiful still-picture can be utilised in making a beautiful motion-picture.

In landscape-work it is recognised that clouds, perhaps more than any other single detail, are important from a standpoint of beauty. To obtain clouds it is almost imperative that a screen be used. The solid yellow screen may be used, of course; but not as satisfactorily as the graduated screen. The film used in motion work has to embrace so many different qualities that any great degree of orthochromatism is impossible. Of course, it has certain orthochromatic qualities, approximately those of ordinary roll-film; but not those of especially sensitised orthochromatic plates. Thus a solid filter necessitates a considerable increase in exposure. It is known to still-photographers, that orthochromatism enters into consideration to a lesser degree in the use of the sky-filter than in the use of any other color-screen. The action of the sky-portion is more one of restraint than of selection. It is known that clouds will usually register if a sufficiently short exposure is given; but that this exposure is hopelessly short for the ground portion. The graduated filter is virtually clear glass at the bottom, allowing all rays from near objects to pass. At the top the deep yellow restrains the sky light and allows the clouds to register, at the same time the color holds back the blue rays and utilises to the fullest extent the orthochromatic qualities which exist in the film. Thus the graduated screen, lying just upon the borderline of true orthochromatism, is entirely practical for use with the small cameras and should result in some very beautiful effects in landscape-work.

Remember that in using such a filter a near object which rises well into the sky will be affected by the filter. If you cannot keep the foreground objects well within the lower two thirds of the frame, do not use the graduated filter. If you wish to obtain cloud-effects in such a case, use the solid filter, increase exposure and obtain them by purely orthochromatic means.

To those who like to devise their own equipment, I should suggest following Mr. Kerst's example. Mount an iris and mask-box. You will be amply repaid for your trouble. I believe that it will be found to be entirely practical to mount the professional Goerz effects by designing a support which will be in turn supported by the tripod rather than by the camera-body. This will allow you to obtain all of the filter and iris-effects; and with care, double exposures may be tried out.

In making double exposures, open the camera in a dark-room and with a razor blade cut a tiny notch in the film just at the top of the gate or other readily identified index point. Then expose the desired portion of the film. Return to the dark-room, remove the film from the camera and wind it back upon the original

spool, taking precautions not to touch the emulsion-side of the film. Thread up and run the film through the camera until the notch comes to the index point then go out and expose the second portion of the film.

Do not try to work to a fine division line. Use exterior masks with finely serrated or fluffed cotton-edges. Double rôle work should not be attempted; but visions and similar work is quite feasible. The reason for this is that these cameras are not built for such work and the registration is not as delicate as in professional instruments. In delicate work, even with such a camera as the Bell & Howell professional model, the usual focusing-aperture is not used; but a supplementary focusing-screen is placed in the actual film-aperture. This is done because of the delicacy of the interior masks used and the necessity for critical registration.

There is no reason that a patient and careful kinematographer should not use the full line of Scheibe filters on his small camera. Try it out and tell us all about your trials and successes.

How have you arranged your projector? With a little work you can make a very good daylight-apparatus which will give full satisfaction without having to darken the room.

The first thing to do is to obtain a translucent screen, such as the translux. This screen may be as small as 18 x 24 and still give perfect satisfaction for the usual home circle. Such a picture would be a failure when projected in the usual manner; but with the projector behind the screen and the screen comparatively close to the spectators, the 18 x 24 will prove adequate. Just consider that this is two inches larger on one side and four inches on the other than the standard 16 x 20 photograph.

A lens of fairly short-focus is used, and the screen set as close as possible to the projector. It will usually be found to be practical to set the screen as close as three feet to the projector.

A square funnel is now built about four feet long. This funnel shall be of such proportions that when the screen is at the proper distance from the lens of the projector, the screen will set back in the funnel some eight or ten inches, and the small opening of the funnel will be directly in front of the lens. This funnel is painted dead-black inside and the portion of the funnel which projects in front of the screen should be covered with dead-black felt or velvet. This makes a shadow-box, which cuts off disturbing reflections.

If the assembled screen and funnel is now set before the projector and the lens accurately focused by means of a mirror set in front of the screen, it will be possible to project pictures with great clarity in the diffused light of the ordinary living-room.

The sixteen-millimeter projector has been placed in some schools; but the great difficulty at present lies in the fact that there is not available any choice of library-film suitable for such purposes. This is indeed a fertile field for the owner of a sub-standard camera, especially those who have had some training in pedagogy.

It is commonly said that in stereophotography the two halves must be sharply defined and of equal exposure. Practice has shown that a wide difference in exposure, definition or even tone is often of great advantage in giving us an unusual and attractive stereogram. Applying the same principle to motion work, we recall that needle-sharp definition and correct exposure are the law. I believe, however, that as your films do not have to pass the examination of the general public who are not versed in modern photography, you will find pleasure and education in applying some of the principles of pictorial photography to your work. I should like to see some extreme soft-focus, some high key and low key work, and other effects which have been used in extreme modification in professional work. I believe that some out-and-out impressionistic work will be appreciated by the pictorial worker. Always remember that your motion-camera is a camera with a magnificent lens-equipment. You can do anything with it which can be done with any still-camera, always excepting manipulation of the developed negative and print. Are you a disciple of Misonne? Try some of his wonderful lightings with the motion-camera. Such a film correctly made should record a bit of fairyland.

QUERIES

Is the Fixed-Focus Lens practical in Motion-Cameras?

A. It is well known that the fixed-focus lens does not exist; but a compromise is made and so called. This is, in reality, a lens of such small aperture that the circle of confusion is at no place large enough to cause distinct blurring in a contact print. In hand-cameras the extreme aperture for the fixed-focus lens is regarded as being F/11. The 16 m/m cameras which use a lens of approximately one-inch focus can be fitted with a fixed lens because of the great depth of focus attendant upon the short focus. Also, as the usual projected image is seldom larger than 24 x 36 the enlargement is not enough to make the confusion apparent. The fixed-focus lens is practical; but the focusing-lens is always to be preferred by serious workers. This fact is recognised by one of the largest manufacturers who makes the fixed focus the standard but furnishes a focusing-mount, if desired. The fixed-focus lens is more nearly fool-proof. The owner sacrifices critical definition for the assurance of always getting passable film.

Can the 16 m/m Film be used in News-Work?

The sub-standard camera is not advisable for news-work, for news-work presupposes timely interest. However, if you obtain a bit of film which is very unusual and which is not of timely interest; that is, review-film rather than news-film, correspondence with a review-publisher may indicate that the value is sufficient to warrant enlargement to standard gauge. It must be remembered that almost any standard film may be reduced to sub-standard without difficulty, but for enlarging-purposes the sub-standard film must be perfect. If you intend to do news and review-work, purchase a standard-gauge camera.



THEY were looking down into the depths of the Grand Canon.

"Do you know," asked the guide, "that it took millions and millions of years for this great abyss to be carved out?"

"Well, well!" ejaculated the practical photographer. "I never knew this was a Government-job."—Exchange.



COMING EXHIBITIONS



APRIL 12 to JUNE 1, 1925. Combined Indiana Pictorial Photography Salon. The Fort Wayne Art School and Museum, 1026 West Berry Street, Fort Wayne, Ind. Last day for receiving prints April 8. Karl S. Bolander, Director.

MAY 10, 1925. V Salon International de Fotografia de Madrid. Last day for receiving prints May 10, 1925. Further information may be obtained from Secretario del Salon International de Fotografia, Real Sociedad Fotografia, Principe 16, Madrid, Spain.

MAY 15 to JUNE 15, 1925. Second International Salon of the Pictorial Photographers of America to be held at the Galleries of the Art Center, 65 East 56th Street, New York City. Last day for receiving prints, April 18. Address all communications to John H. Kiem, Chairman Exhibition Committee, Art Center, 65 East 56th Street, New York City.

SEPTEMBER 14 to SATURDAY, OCTOBER 24, 1925. Seventieth Annual Exhibition of the Royal Photographic Society of Great Britain, 35 Russell Square, London W.C. 1, England. Last day for receiving prints Friday, August 14. We have entry-forms and shall be glad to mail them as long as they last, to any readers who will send two cents in stamps for postage.

A Splendid Example to be Followed

IN APPRECIATION of the splendid work of Dr. George E. Blackham and George A. H. Eggers in compiling two albums of photographs of historical Dunkirk, views and portraits of men prominent in the history of the city, the Chamber of Commerce tendered them a luncheon. There were some seventy-five persons present and both men were given ovations.

For the last two years, these men, both residents of Dunkirk for many years, were engaged in compiling these photographs and mounting them in album-form. The albums were formally turned over to the Chamber of Commerce and will form a part of what promises to be a most interesting collection. The albums will be kept in the Chamber's headquarters where they may be viewed at any time.

There are two hundred photographs of Dunkirk scenes and at least seventy-five portraits of men who have been prominent in life of the city many years ago. Photographs of some of the old buildings and landmarks were not available and pictures of these were drawn from memory by Mr. Eggers.

The handsome polished wood-cases to hold the albums are the work of the vocational class of the Dunkirk High School, and Edgar R. Boniface of Boniface's art-shop is responsible for the handsome lettering on the albums.

Dr. Blackham for years has been an enthusiastic amateur photographer and photographed hundreds of scenes in and around Dunkirk. With the assistance of Mr. Eggers, the important negatives were selected and printed, Mr. Eggers also supplementing this with his excellent pen-drawings.

Dunkirk (N.Y.) Evening Observer.

[It is with pleasure that we print this reference to Dr. George E. Blackham who has long been one of our subscribers and friends. EDITOR.]



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL-RES.



(Courtesy Fairchild Aerial Surveys, Ltd.)

COMMERCIAL AIR-STATION

FRANK H. WILDUNG

Commercial Aërial Photography and Preparedness

HAVING read the articles in PHOTO-ERA MAGAZINE devoted to the Military Photographer, I thought that I would write a few lines for this department. Not being in the military service, at present, I hope that you service men will excuse my intrusion in this department. At the beginning of the World War, before we were mixed up in it, I was stationed in the Hawaiian Islands at Fort Kamehameha, a Coast Artillery Post.

As it happened I was walking number one post in front of the guard-house—this post also being the

point in writing this letter was to show you a few prints made from planes in northern Quebec for commercial purposes. Print number one shows a commercial air-station in a wooded section of the country. Is there anything the camera has not seen? Notice the letters on the tops of the planes and the runway under the water. All of the buildings under the trees are in deep shadows, yet the camera has seen them all.

Print number two shows rather open country. This print will be placed upside down in the magazine in order to illustrate to you what Major Mark Brooke, U.S.A., told about in the interpretation of aërial photographs made vertically. Notice how all of the contours



OPEN COUNTRY—ALTITUDE 9000 FEET

(Courtesy Fairchild Aërial Surveys, Ltd.)

FRANK H. WILDUNG

entrance to the garrison. I noticed a foreigner coming near the post. Upon asking him where he was going, and being told that he was going over to see the Major's cook (who also happened to be a foreigner), I was about to let him pass when I noticed a little black case under his arm. Having been a photographer nearly all my life, I called the Sergeant of the guard and told him that this man was carrying a camera for no good purpose. Of course the Sergeant thought that I was mistaken; but I insisted that this foreigner be taken to the Officer of Day. Upon his arrival, it was found that he had two rolls of film in his pockets and one in the camera partly exposed. We relieved him of his camera and film; and, upon development of the films, we found that he had made pictures of the other two coast-defences on the island. Of course, these pictures would have been very nice to turn over to the foreigner's War Department.

It seems as though I am getting off my track, as my

change their positions when they are incorrectly looked at. All shadows should be toward observer.

Print number three shows country of similar type photographed in the winter. You certainly can pick up contours and detail in this print. Notice the fence-line running through the snow and you will have some idea as to what can be seen in a vertical aërial photograph.

My first reference to the foreigner and his camera shows just one use of the camera and my second shows what we are doing in commercial aërial photography, and what a help it would be to our country in time of war. If all the men in commercial photography would note the possibilities of their own line for military purposes, what a tremendous help it would be to adequate National Defense.

I would like to hear from men interested in Military Photographic work, as the old saying goes "Once a soldier always a soldier"; and you will always find me



(Courtesy Fairchild Aerial Surveys, Ltd.)

OPEN COUNTRY IN WINTER

FRANK H. WILDUNG

ready to give any information that I can to men interested in this work.

FRANK H. WILDUNG,
Ex-First Sergeant, A.E.F.

Lieut-Comdr. Karl F. Smith Joins Us

In a very cordial, helpful letter received from Lieut-Comdr. Karl F. Smith, U.S.N., Photographic Officer, Aircraft Squadrons, Battle Fleet, he offers his co-operation in promoting interest in military photography. He has promised some interesting material for this department and I am sure that it is a pleasure to have the U.S. Navy so ably represented in our pages. We are all working for the cause of National Defense and reasonable preparedness, whether it be the U.S. Army or the U.S. Navy. This common purpose, and our loyalty to our country, makes us, after all, one service—afloat or ashore.

What of the Future?

In following the recent changes to the Organised Reserves of the U.S. Army, it has been a source of deep satisfaction to me to witness the quiet patriotism, increasing strength, enthusiasm and efficiency with which this third, and largest, component of our army is taking its important place in National Defense. It is truly a citizen army, costing comparatively little to maintain; but constituting a tremendously powerful argument for law, order and international peace. The type of men who are becoming commissioned officers or enlisting in the ranks of the Organised Reserves mean business. They believe that a country which gives them the right to the pursuit of happiness also has the right to expect protection in time of need. Our many sad experiences in the past have convinced these men that the most brave and ardent patriot is of no military value in modern warfare unless he is

a trained man. Hence, the officers and men of the Organised Reserves, believe that as American citizens they should learn enough about military preparedness to be able to stand by when the country needs trained troops to meet a trained enemy. Be it remembered that the bubble of "a million men springing to arms over night" was burst with terrible consequences, and not very many years ago. It simply cannot be done today, when an army is composed, in great part, of scientifically trained specialists.

As I have been writing these lines the thought came to me, what of the future? Today this third component of the U.S. Army is getting its feet under it. For the next few years it will grow in strength and influence. It will win the confidence and respect of all true American citizens. But many of us enthusiastic, willing and fit *now* must succumb eventually to the demands of the years and who then will carry on? If we do our duty now, as citizens and as soldiers, our ranks will never grow thinner; but, instead, they will increase in number and there will be young, fresh, physical and mental reinforcements without limit. How is this to be done? By standing behind the Citizens Military Training Camps and the Reserve Officers Training Corps and by encouraging qualified enlisted personnel to make the most of their opportunities to advance. Our aim should be to so organise and support our sources of replacement that each year our "casualties" would be more than made up, and thus our strength, enthusiasm and efficiency be maintained far into the future.

"Nothing much to do with Military Photography" the reader may say. Very true. But before we can have trained military photographers we must have the men who are willing to step forward and be trained. Do you happen to be one of them?



LONDON LETTER

CARINE AND WILL CADBY



THE film, already well known over here as the "Epic of Everest" will, we imagine, be shown in the States about now. It is different from most films in that it is the official record of a remarkable journey, *viz*: the third attempt to reach the highest peak on earth; and although a slight story has been introduced it simply suggests the daily adventures and toil of the intrepid explorers.

We believe that the Lhamas who specially came to England to give a demonstration at the beginning of the film of their secular music and dancing, are to accompany the entertainment to America. In an admirable setting, with a superb, and presumably typical view of Tibet as a background, they in no small degree atune the mind of the Westerner to the strange and sacred character of the Valley of the Rongbrek, where the Tibetans have built higher than the loftiest mountain of the Western world, a monastery in which they worship gods that "dwell in the tops of all the snows".

But to the keen photographer all this is but trimming to the actual pictures of Mount Everest, to the marvellous views of snow and ice, splintered, torn and twisted in one place into a fairyland of bergs, some of which were one hundred and fifty feet in height, where the air was so rarified and unprotective that the travelers were in danger of being frozen in the shade while sunstroke was a real danger in the sun. And it was in this particular locality that the most pictorial results were obtained. One forgot that one was sitting in the prosaic Scala Theatre in dingy London, as the screen showed a glittering avenue of huge pinnacles through which the tiny figures of the expedition picked their way; up, up, up and out of the scene at the top of the eerie landscape. The views made comparatively near the top of the mountain are very fine, and many show the rapid formation and movement of clouds around the peaks.

Altogether it is a show that no photographer should miss and the results are far superior to those obtained on the earlier expeditions, and Capt. J. B. Noel F.R.G.S. who is responsible for the films is to be heartily congratulated. He has had much photographic experience in Tibet, for during exploration and photographic work during the years 1911-13, he succeeded in getting within forty miles of Mount Everest, but was then discovered and turned back by the Lhamas, and on his return to England he addressed a joint meeting of the Royal Geographical Society and the Alpine Club, suggesting an organised attempt to conquer the world's highest mountain. The expeditions of 1921-22 were the outcome, and this last attempt shows how immensely he has profited photographically by these earlier experiences.

Rumors of a great snow shortage in Switzerland decided us to forego our change this year, for what is the good of winter subjects without snow?—But towards the end of February, when the season is supposed to be waning, weather-conditions improved, snow fell, and we heard Switzerland was looking like fairyland. This determined us to come, and up to now we are finding our late season experiment a success. Its advantage so far as photography is concerned

consists in the longer daylight. We can now make satisfactory exposures after tea, and in the morning the sun being higher, dodges the dominant peak, and so appears much earlier. And it is just these early morning and late afternoon effects that are the most attractive. We had expected to find the hotels empty, but the uninterrupted sunshine of this most erratic season has kept the guests, and we are by no means the only occupants of the hotel darkroom. Sometimes, indeed, we have to proceed very warily, for we find it festooned with yards of wet film. Quite a number of amateurs have brought out cinematograph cameras and have been reeling off films of different sports. We even discovered a party of enthusiastic skiers who had got themselves kinematographed by one of their number simply to discover their faults of attitude and movement, so as to be able to correct them. This is a case where photography is a chastener and vanity destroyer, for men who thought they were gracefully making the rhythmic telemark turn had a sad awakening when the truthful film coldly disclosed their performance.

This incident illustrates how absurdly seriously the winter visitor takes his sport; but if only he would devote a little of this enthusiasm to his snapshots, what interesting pictures he could get. The Swiss do not agree with the frivolous and deprecating treatment of our craft shown by the general run of visitors, and when one of the hotel guests here, the Marquess of Anglesea, bought a camera in Davos, the enthusiastic photographer who sold it delivered a serious homily on its various movements that lasted so long that poor Lord Anglesea saw his train for Klosters gliding out of the station before it was finished. He was not even allowed a book of directions, but was told that only his own study and patience could teach him, and the only book required was one in which to make notes of every exposure. But can the seeker after effects in the snow mountains always register each exposure? We think not; for it is far from being such delightfully straightforward work. Only yesterday we were busy photographically on a steep snow slope, with nine decorated trees and peaks in the distance. The sun was shy but necessary for the effects. We waited, and were rewarded by a fleeting glimpse, during which four different views were made, each one requiring a slight variation of exposure. During those strenuous minutes note books were at a discount, and instinct, heavily leavened with experience, held sway. Moreover, we could not even remember the first two exposures when we sat down after the event to pay proper homage to the notebook.

The subject of payment for pictorial photographs which PHOTO-ERA MAGAZINE has been ventilating is one which every photographer who does at all serious work must find interesting, for however independent he may be financially of payment, the fact that his work has a market value is a tribute to his skill that he cannot fail to appreciate. Our idea has been to steer a middle course between the extremes of charging the same as some well-known draughtsman might do, or just covering the outlay of time and materials. We have had many opportunities of privately selling,

and it has always seemed to us a little suggestive of a pose to pretend, as some do, that only one print can be secured from a negative, just as it is absurd to charge nothing for the knowledge and trained skill that go to the production of the negative and the finished picture. Publicly destroying a negative so as to enhance the value of the one or two pictures made from it, is all very well from the dramatic point of view; but it does away with one of photography's great assets, *viz.*, easy duplication.

One of the most popular shows in London is now open at Olympia namely the Ideal Home exhibition. Judging by the crowds that visit it—the crush can only be compared to Wembley—the Ideal Home idea must appeal to every Briton.

Photography takes up quite a fair space. The Imperial Dry-Plate Co., Houghton's, Johnsons, Butchers, have very attractive stands, but Kodak excels and has captured the popular imagination with the representation of a real old English timbered cottage which suggests "ideal home" photography.

It is sound business to push photography at a popular show like this, for although the majority of visitors come to look at the new houses—there are two of the modern steel type—and what appertains to them, they are reminded what a big part photography can play in every day life.

Our Associate Editor Abroad

READERS of the Editorial and Groundglass pages may be interested to know that the regular writer thereof, Wilfred A. French, is again the victim of Wanderlust and, together with his better-half, may be found revisiting England and Scotland, but to be back at his desk about June 22, 1925. His itinerary, when he left New York, on the S.S. "Aurania," April 4, was as follows: Cobh (formerly Queenstown); Dublin; Liverpool; Glasgow; Edinburgh; Durham; Ripon;

Wharfedale; York; Lincoln; Boston; Peterborough; Ely; Cambridge; London; Canterbury; Oxford; the Shakespeare country and neighboring points of interest; Devonshire, Cornwall, Wales, and, before ending at Liverpool, where he hopes to embark on the S.S. *Carmania*, for New York, Chester and Conway.

Mr. French, who has planned to see much in the short time he has allotted to his trip, hopes to be able to visit some of the camera clubs of Great Britain, also some of the exhibitions, including that of the International Circle of Pictorial Photographers, at Liverpool. Before leaving, he wrote all the material for his several departments, up to the July issue.

The Sender's Address Quickly Affixed

WHENEVER a photograph or a package from Dr. J. B. Pardoe reaches this office, it bears a small, red label, in form resembling a painter's palette, with the imprint in white letters—"Dr. Pardoe, Bound Brook, N.J." If a letter, it bears this (adhesive) label on the back.

As Dr. Pardoe sends away many photographs to friends, exhibitions and publications, he says that he finds these adhesive labels convenient substitutes for the written address, great time-savers, and that they are easily read.

We advise our readers who send out many photographic prints, to provide themselves with similar labels, a suitable quantity of which can be prepared by any dealer in adhesive labels, and at moderate cost.

Always Acceptable

AUTHOR: "The very first thing I sent to a magazine was accepted."

YOUNG FRIEND: "Was it poetry or prose?"

AUTHOR: "Prose. It was a cheque for a year's subscription."—Exchange.



COUNTRY HOME OF HARRIET BEECHER STOWE

WILFRED A. FRENCH



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



Annual Exhibition of The Union Camera Club

THE Boston Young Men's Christian Union Camera Club, better known as the "Union Camera Club", opened its regular annual exhibition of members' prints in Union Hall, on Monday, April 6, and extended it over a period of six days. One hundred sixty-six prints by twenty-nine members were shown. An unstudied view of the show as a whole gave a very strong impression of the high average of excellence attained by all the exhibitors. In years past one was wont to observe the contrast in pictorial and technical qualities between the work of acknowledged leaders and workers of lesser abilities. In this year's exhibition no such marked differences were evident, signifying that this club's leaders are truly leading the newer and less experienced workers, not only to become expert technicians, but also to the appreciation of what is really sound pictorial work. The crude "photo-finisher" type of print was conspicuous by its absence, thereby raising the quality of the whole show. One missed the contributions of former exhibitors such as Selig, Hammond, Akasu and others. However, the new strength of the club has developed so rapidly, that there was no dearth of high class specimens of photographic art.

The prints were tastefully displayed under the management of the exhibition committee, composed of James M. Andrews, Raymond E. Hanson and Frank R. Fraprie. Each exhibitor's work was shown in a group. Work of marked excellence was noted in the exhibits of the following.

W. A. Barretto had two prints of widely differing themes. "The Trail of the Plow" showed a satisfying plowing group, with fine out-of-door atmosphere. "L'Apache" was a novel picture, done in dark blue, of a young man of the thug type. The face, in profile, cap and upper part of body was in strong artificial light relieved against a dark wall; the lower part darkened away to nothingness. The whole effect was that of a crook, awaiting the opportune moment to commit some dark deed; the face, with cigarette in mouth, being lifted up, as if expecting a signal. A very original and imaginative piece of work.

A. H. Blackinton's study of three elephant images was finely arranged, two white smaller ones forming a good foil for a large black head and fore-part of another. Mr. Blackinton's abilities as a news-photographer, were admirably demonstrated in his "Entering Port", a print of the steamship Majestic, being docked by a group of towboats. The technique was flawless in every respect.

J. B. Borges's "The 5.15" was a clever interpretation of a railroad train within a station, apparently having just arrived. The amount of shadow detail rendered and the handling of difficult highlights, together with good composition, made this conspicuous.

W. A. Bradford was represented by a strong group; two of which, "Sunset", a clouded sky over water, with brilliant lights, and "Solitude," a wood interior, were pre-eminent. The latter had a finer quality than most photographs of this type of subject, the

fine technical attainment showing in the absence of solid shadows and "chalky" lights. One felt the charm of the spot, with its lovely pool in the foreground.

Ennis W. Clarke showed a panel picture of a white yacht on a lazy sea, with reflections of the "White Sail". A very correct rendering of tone.

Joseph Coburn Smith had two markedly strong pictures. One was a still-life study of a chessboard with the pieces in place, a strong light being thrown on two white knights, giving title to the picture; "The Crusade of The White Knights." The other print was "London Night", which was the cover picture of March PHOTO-ERA MAGAZINE and the reader is referred thereto.

Myron J. Cochran's "Turning the Sod" was another splendid plowing picture. His "Uncle Jim" was a refreshingly straightforward portrait of a sunny-faced old man, with a smile to make you love him at first sight. No frills or attempts at "effects"; just a good straight print, with splendid flesh-tones, and good arrangement and spacing. Another good print was "Winter", showing a snow-clad cottage at the end of a snowy roadway.

Raymond E. Hanson was on deck as usual, with a good group, "Winter Woods" showing a snow-scene in pine woods. The clever handling of spots of sunlit snow and deep evergreen trees showed the perfect control this craftsman has of his favorite medium, bromoil. "Night in Nantucket" is a departure from his usual subjects. A large square house at night, in dim outline, with light from the interior coming through the windows. This was in dark blue bromoil with yellow highlights. Mr. Hanson even got in some stars (by hand).

Franklin I. Jordan had two good prints "Wolf" a police-dog in alert pose and "Invocation" a classical genre of a draped figure on marble steps with hands raised toward heaven. A foliage background gave ample relief to the figure.

Ralph Osborne's "Sunny Monday" was a fine interpretation of sunshine patterns on white clothes on wash day, just over the fence. The nearby tree formed a dark foil and the sun-spots on the road were well controlled, giving balance to the "washing" on the line. Mr. Osborne also showed a portrait of the president of the club, W. H. C. Pillsbury which was admired. It is rather serious for the genial president, and the lower face appears rather dark and prominent, to the present writer.

W. H. C. Pillsbury in "Old Pewter and Fruit", a fine still-life composition, showed one of the best tonal and texture-quality prints in the exhibition. Beautifully composed and lighted and rendered with great skill, it is indeed a gem. "Sammy" a profile portrait of a dog was another hard subject well handled.

A. C. Sherman, Jr. had two interesting prints. "Il Trovatore", showing a little statue of a troubadour on a stone wall overlooking a garden. This was very comical. "Hall of The Mountain King" a representation of what appeared to be the interior of a cave with columns of rock formation. The truth is that it was the under side of a fountain on Boston Common, in winter, sheathed in ice and icicles reaching the icy

ground. It was exceedingly novel and clever, and in perfect tone-value.

R. G. Spencer had a pleasing picture of a foreign village; well composed and of good quality. "Nan-nette", a striking figure of a dog against the sky, reminded one of a gargoye on a parapet.

Herbert W. Turner, who never fails to show some good stuff, showed a fine "Winter Brook" with snow-bound banks and meadow for a setting. The contrast of light and shade was fine and joined with this artist's well-known composing talent, made a strong appeal.

O. A. Ostby had one of the best in "Water Lilies", a selection from a pond of these choice flowers, in a fine composition.

E. N. Smith, a son of the late Henry S. Smith, who perfected the widely known soft-focus lens, showed several large portrait heads, in soft focus. One of them, "The First Mate" being a fine character study of a naval petty officer, with cap on, and smoking a pipe; the inscrutable expression of the face giving rise to speculation.

A part of the exhibition was a display of 48 Autochrome and Paget color-plates, in $3\frac{1}{4} \times 4\frac{1}{4}$ and 5×7 size. They were well displayed in an eight-sided light-box about three feet in height illuminated from within by powerful electric bulbs. They were the work of James M. Andrews, W. J. Jaycock, A. H. Blackinton and Franklin I. Jordan, who are very expert in color-photography. All were beautiful examples of this process and the exhibit was in fine contrast to the monochrome prints.

In conjunction with the club's exhibition, Frank R. Fraprie, editor of *American Photography*, displayed 110 prize-winning prints from the fifth annual international competition held by his magazine. Being contributed by foremost workers in America and abroad, they formed a show well worth long study and unstinted admiration. They were truly "crème de la crème". Lack of space prohibits individual mention.

E. H. WASHBURN.

"The Book of Photo-Supplies"

UNDER this title W. Butcher & Sons, Ltd., Camera House, Farringdon Avenue, London, E.C. 4, England have issued a remarkably interesting combined instruction-book and catalog. We have examined it with pleasure and urge our readers to send for a copy without delay.

"The Scottish Federation Blue Book"

AGAIN we are glad to welcome the helpful and interesting Scottish Photographic Federation Blue Book. It possesses a wealth of photographic information and is virtually indispensable to the camerist who visits Scotland. The price is threepence and copies may be obtained from John Macdonald, 27 Aberfeldy Street, Dennistown, Glasgow, Scotland.

Royal Photographic Society Exhibition

EDITOR PHOTO-ERA MAGAZINE:

I beg to inform you that the 70th Annual Exhibition of this Society will be held from Monday, September 14 to Saturday, October 24, 1925. The last day for receiving entries is Friday, August 14.

The Exhibition will be divided into three Sections: Section I. Pictorial Prints. Section II. (A) Pictorial Lantern Slides; (B) Pictorial Color Transparencies and Prints. Section III. (A) Natural His-

tory Photography; (B) Photomicrographs; (C) Radiographs; (D) Astronomical and Spectrum Photographs; (E) Stereoscopic Photography; (F) Scientific Color Work; (G) Technical Applications of Photography, including Survey and Record Work, Press and Theatrical Photography, Telephotography, Aërial, Meteorological, Metallurgical and Geological Photography, Photography by Electric Transmission, etc.; (H) Kinematography.

There is no limit to the number of entries in any Section, but in Section I, Pictorial Prints, it is improbable that more than two prints by any exhibitor will be hung. No entry-fee is charged in any Section.

Under separate cover I have had pleasure in sending you a supply of the Entry-Form and Prospectus and shall greatly appreciate your kind assistance in making the forms available to your readers.

Yours faithfully,

H. H. BLACKLOCK, *Secretary.*

A Cordial Invitation from Camera Club, London

It is with pleasure that we give to our readers the letter which we received recently from The Camera Club, 17 John Street, Adelphi, W.C. 2., London, England. It speaks for itself and serves to unite more closely the friendly ties which bind the two great English-speaking nations of the world.

EDITOR PHOTO-ERA MAGAZINE:

I am instructed by my Committee to invite the attention of your readers to the facilities afforded by *The Camera Club, London*, to gentlemen, interested in photography, who are visiting London.

The Club is centrally situated and provides all needful appliances for the practice of photography, in addition to the amenities of a social club.

On the usual introduction, gentlemen visiting England, are elected Temporary Members for a period of 3 months on payment of one Guinea.

Yours obediently,

H. PHILP, *Secretary.*

MARCH 24, 1925.

Brooklyn Institute Notes

BEGINNING March 16 there was hung at the Brooklyn Institute an exhibition of the work of the Pittsburgh Salon Group, which reflected the character of that group.

O. C. Reiter was represented by prints of diverse subject and treatment, including several of his characteristic prints of Pittsburgh's industrial phases.

David and Eleanor Craig showed an interesting still life with sunlight streaked across a table.

J. Will Kellner sent "The White Kerchief" a character study of an old woman. Probably the best of the show.

N. S. Wooldridge showed a group of landscapes filled with soft atmosphere, printed on blue and green carbon.

W. C. and T. M. Jarrett had a group of charming child-studies and two landscapes, one a snowstorm, the other a lakeside bathed in sunlight.

B. H. Chatto sent two excellent carbon prints, "Fairyl-land", a river overhung by trees and one unnamed scene of a farmhouse with heavy lowering clouds done in dark blue.

P. F. Squier was represented by several large bromides among them "A Sombre Winter's Day", a snow-

scene, and "Finding Treasure in the Old Barn", showing two children in the sunlit doorway of a barn.

W. W. Zeig had two large bromoils "Drizzly Morning, North River" inked in green and "Fish House, East Gloucester" in warm tones with nice water-reflections.

The classes are concentrating their efforts on preparing prints for their annual exhibitions. Mr. Zerbe's classes will show their work the week beginning April 20 and Miss Lauffer's class will exhibit theirs beginning April 27.

The annual exhibition of the Department will be held the week of May 11, with the formal opening on that night.

MYERS P. JONES.

Exhibition of Chicago Camera Club

THE Annual Exhibition of Pictorial Photography held at the Art Institute of Chicago under the auspices of the Chicago Camera Club had for its jury of selection Edgar S. Cameron, Marshall D. Smith and George Alexander. The print director was F. M. Tuckerman. Among those who exhibited prints were W. A. Ball, C. Curry Bohm, A. R. Born, Ralph J. Fallert, R. L. Farrington, E. E. Gray, George Henry High, W. D. Hughes, Lee Miller-Jones, K. A. Kjeldsen, Wm. E. Lamb, L. B. Mayo, A. W. Moline, O. W. Olson, Harry C. Phibbs, George C. Poundstone, Frank Rich, J. A. Rogers, John Julius Ryan, Gilbert B. Seehausen, George Sohn, P. T. Tarnoski, R. W. Trowbridge, Ralph R. Weddell, Edward F. Weis, Leonard Westphalen and Paul Wierum.

International Congress of Photography

AFTER a lapse of fifteen years an International Congress of Photography is to be held this year, June 29 to July 4, 1925, in Paris. The last congress was held in Brussels in 1910, where a very successful meeting was held attended largely by representatives from all nations.

The Congress will be divided into four sections: (1) Scientific; (2) Technical and artistic; (3) Historical and documentary; (4) Technique of cinematography—in connection with the Congress of Kinematography. An historical exhibition of photography and a centenary celebration of the beginning of photography will be held during the Congress.

At the request of the International Committee of the Congress, an Organising Committee in the United States has been formed, the members being: Mr. F. F. Renwick, Dr. W. D. Bancroft, Mr. W. H. Manahan, Mr. E. J. Wall, Dr. H. E. Ives, Professor R. W. Wood, and Dr. C. E. K. Mees, chairman. A list of American patrons has also been drawn up; their names are given on the attached list.

The Congress is especially eager to obtain papers relating to the branches of photography with which it deals from workers in the United States. Offers of such papers can be communicated to me, and I will forward them to the secretary of the Congress or they can be sent direct to M. G. Labussiere, 5 rue Brown-Sequard, Paris, XV. The secretary is eager to know at once what contributions will be available, though it is not necessary that the whole paper should be sent to him. The title and a brief abstract should, however, be forwarded at once.

C. E. K. MEES,
Eastman Kodak Company,
Rochester, N.Y.

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International Congress of Photography

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*Members of Organizing Committee,



THE PUBLISHER'S CORNER



When It's Forty Below in Maine

Our good friend William H. Blacar of Bangor, Maine, sent us a little reminder of winter days "down East" which we believe our readers will appreciate. Those who have had no experience with snow and ice



40 DEGREES BELOW

W. H. BLACAR

or forty degrees below zero will probably wonder that any of us continue to live in such a cold country. However, it is not so bad, after all. In sending the print Mr. Blacar wrote, "I enclose a New England picture for your edification and education;" and we hope that our readers will be duly informed with regard to what forty below zero may necessitate, at times.

"It Does Beat All!"

DURING the past few months I have been very much interested in the comments which have come to me, verbally and in letters, with regard to the contents of PHOTO-ERA MAGAZINE. All communications have been constructive and very helpful. Not one received thus far has been other than kindly and encouraging. My purpose in writing this paragraph was not to place the emphasis on the compliments received but rather on the subjects which appealed to my correspondents and caused them to write. An editor or a publisher should ever keep attuned to the things which interest, serve and stimulate his readers. By noticing their reactions and comments he is enabled to aim nearer the mark and to serve them to better advantage. That is exactly what I have been trying to do; but I admit frankly that "it does beat all" the subjects that readers like better than others. For example, one subscriber writes that the best thing in the April issue was an editorial reference to the value of the Citizens Military Training Camps and the airplane photographs by Lieut. A. W. Stevens. Another thought that the eclipse pictures were worth the price of the magazine. Still a third was glad that our stereo-department was holding its own and getting support.

A fourth stated that the leading feature of every issue for him, was "The London Letter" conducted by the Cadbys'. I could mention a number of others. The interesting thing to me is that these writers say nothing about the rest of the magazine. Apparently they are pleased with their particular part of it and that is enough. Now, as a matter of fact, the April number was edited and arranged under very trying conditions. It was not just what I hoped that it would be; yet, this number seemed to cause many to write me. Often, the very issue that we have worked the hardest to produce never draws much comment; but an issue that we feel is not just as we want it, typographically and editorially, seems to start a flood of interesting and helpful correspondence. Yes, "it does beat all!"

If You Could See What I See

As I write these lines and look out over the waters of beautiful Lake Winnepesaukee, to the islands and on to the Belknap Mountains, far across the lake, while lake, islands and mountains seem to dance in the spring sunshine, I wonder how many of my readers would not be glad to leave the noise, dust, crowds and pavements of the city and join me for a quiet hour. Perhaps some might say that beautiful scenery and the song of bluebirds adds no dollars to one's income; but I venture to say that fewer dollars and more quiet enjoyment of nature will make up the difference in health and true happiness. I know the city, having lived there nearly all my life. I admit its attractions and benefits; but if the reader could see what I see this very moment, he would understand what the psalmist meant when he sang of the hills from which came his strength.

In the June and July Numbers

ALTHOUGH, as a rule, I believe in letting each issue of PHOTO-ERA MAGAZINE stand or fall by itself without much heralding, yet, in the forthcoming June and July numbers there will be some features not found elsewhere. Among these may be mentioned an illustrated review of The Twelfth Pittsburgh Salon by Sophie L. Lauffer and an account of the exceptional school of photography conducted by the U. S. Army at Chanute Field, Illinois. There will be others; and these will be good, too. Of particular interest will be the many practical, interesting and stimulating items which will be found under "The Amateur Kinematographer", "The Stereophotographer", "The Military Photographer" and "Here, There and Everywhere". Illustrated feature-articles have their place and so have the little items of news, comment, technical tips and letters. In short, read PHOTO-ERA MAGAZINE from cover to cover—you'll find something helpful and worth the effort.

Frankly, in making up this issue I came to the end of my available space with enough material left over for another number. There wasn't time to re-arrange things, so that several departments are again omitted. They'll be in the June and July issues.



FROM A PITTSBURGH OFFICE WINDOW
CHARLES K. ARCHER
TWELFTH ANNUAL PITTSBURGH SALON



PHOTO-ERA MAGAZINE

The American Journal of Photography

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No. 6

The Twelfth Annual Pittsburgh Salon

SOPHIE LOUISA LAUFFER



EVER was an exhibit given under more favorable housing and thought in arrangement than the Twelfth Annual Pittsburgh Salon of Photographic Art held during the month of March, 1925, in the Gallery M of the Department of Fine Arts, Carnegie Institute, Pittsburgh, Pa. We will pass over the work of assembling the prints by the members of the Salon, the selection of pictures, the excellent arrangement on the walls, to the subjects of the prints, and their respective artists.

Perhaps it will be best to group the work around the six prints reproduced in this number of PHOTO-ERA MAGAZINE.

Over one hundred and fifty pictorial workers from all parts of the world are represented in this excellent exhibition. Three hundred and thirty-four prints of various mediums and sizes were hung and grouped—disregarding the artist—but for the general effect thus giving unity to the whole.

Good open landscapes are all too few in the exhibition. However, there are some most worthy workers in this field represented. E. Osterloff, whose print "Pastorale" is reproduced herewith, certainly is a master in the simple Corot effect he has depicted. William Elbert Macnaughtan has kept his same high, consistent standard in his three prints. Ethel Hill, a beginner, shows much feeling in her delicate "Winter in Vermont". R. L. Farrington's "Sinnissippi Valley" has all the qualities of a painter in his landscape. One sees beyond the trees on each side of the peaceful valley. Leonard Misonne has five bromoils all in true Misonne style. "Sale Temps" is somewhat different from his usual theme. It is a very vigorous and strong, stormy street-scene.

John Whitehead is represented by his well-known "Midsummer's Night" and by his "Ruins—Old in story"—a charming bit well

handled, reproduced as the frontispiece of the catalog.

A. Merrill Powers in his "Pastoral" shows what can be done with a control process. It is a multiple gum 18 by 22 inches; and, by means of gum bichromate, the artist has been able to give just the right light and shadows to a girl driving home her cow, just as evening is coming on.

Edwin Casper's "Winter Landscape" must not be forgotten. In the foreground is the frozen pond, then the snow-clad hill and in the distance the snug little house—all giving a feeling of serenity and peace.

Then, too, "Pont de Chanal" by Chris J. Symes should be mentioned. It is a very difficult composition, horizontally cut in two; but by means of proper light and shade, an excellent arrangement of spacing.

"Elysian Trees" by Ernest Pratt gives one more of the western atmosphere than any other picture on the walls.

"Midst Quiet Waters" by O. W. Olson is a good subject which would be much improved if the lights among the lilies were taken out.

Several prints show a fine handling of a group of two, that most difficult subject to portray not to show divided interest. One of the best of these is "The Hindoo Princess" by Laquan I. Nakajama, which can be studied in the reproduction. In it the man in the background is subdued but absolutely necessary to give dominance to the center of interest, the Princess.

Ortiz J. Echagne of Spain shows four prints, all pleasing, and in a medium different from other workers. Evidently, most of his work is combining printing,—the figures in the foreground having been cut out, inserted in the whole print, and a new negative made. "Lagarteranen en Misa" is an excellent example of subordinating of all figures and background to give the attention to the two gossiping.



SHADOWS ON THE WALL

ELEANOR L. SMITH

TWELFTH ANNUAL PITTSBURGH SALON

Jane Reece's "The Eternal Plea" is a study of two figures. It is simple in detail, well worked out and shows good spacing.

Walter J. Collinge shows great variety and interest in his subject matter. "La Fête Bleue" is a group of two perfectly balanced in the two masqueraders with balloons well handled and aided by the lighted lanterns over head. Although "Blue Water" and the "Fairy Ring" are not in the above group, mention should be made of them. The former is a seascape different from the average. It shows a bit of the side of a vessel where the waves and deck meet and is certainly realistic. The latter is filled with action. It is an outdoor subject of a nude child supporting an immense ring, indeed, only by

fairy trickery could so slight a figure support the ring.

Perhaps the most difficult of these groups of two is perfectly handled by Viroque Baker in "The Brothers".

In architectural subjects there are many good examples. From a Pittsburgh Office Window, by Charles K. Archer, is a commonplace subject most effectively worked out with excellent tonal quality, as can be judged from the reproduction. Very similar is John H. Kiem's "Out of my Window" perhaps showing more of the bustle of New York City. In the foreground is a bit of Madison Square, the taxies next, and in the background a perfect balance made by the skyscrapers. O. C. Reiter in "Housetops and



THE MIRAGE

TWELFTH ANNUAL PITTSBURGH SALON

HOLMES I. METTEE

Cathedral" has a fine treatment of the spirit of the winter sky. The flat roofs in the foreground lead one right up to the Cathedral.

Wm. A. Alcock has five prints of excellent quality. "Roof-Tops, Cannes" is a most unusual rendering of a seemingly uninteresting subject. Shadows play an important part.

Dr. A. D. Chaffee has five bromoils dealing with architectural subjects, all beautiful prints, such as only this master can produce.

"Battery Park" by David and Eleanor Craig shows us the massive skyscrapers in the background with the typical loungers in the foreground, reading their papers.

John Paul Edwards has changed his medium and delights with his six bromoils. "Hangman's Bridge" shows a building structurally strong with darks and lights well defined and spaces well broken up.

Dr. D. J. Ruzicka has five prints, all excellent. "Morning Sun—Venice" gives all of the sunshine—gondolas—romance. The spirit of Venice is felt while viewing it.

P. F. Squier has treated his home-city of Pittsburgh in a different and most attractive manner.

"A Bridge—Venice" by Joseph Petrocelli is an interesting print from the point of view of process as well as from artistic arrangement. The process is resinotipia.

Frederick M. Bush has a beautiful thing in his "Harkness Tower."

In water front prints "The Mirage" of Holmes I. Mettee stands foremost. The foreground of snow and ice shows the smoke from the buildings in the distance as seen through the pillars of the bridge. There is a fine feeling of atmosphere shown as all may learn from the reproduction.

C. N. Gibbs in "After the Thaw" has made the most of a bit of water, floating ice, and stump in the water. There is excellent ice-and-water quality.

Mrs. Eleanor Smith has an exceptional print showing sunlight and shadow in her "Shadows on the Wall". It is a comparatively small, triangular composition where the light and shadows are made much of. The artist has made it at just the right time. The reproduction shows what I mean.

Salome E. Marckwardt shows a homely old red flower-pot, a geranium-plant, part of their shadows, a shadow from the window to hold them together—truly a "Study in Dynamic Symmetry."

Edwin B. Collins has a good thing in his Decorative Study "Trumpet Vine", a Japanese effect, a simple branch, a flower or two, shadow

to repeat and give relief, monogram in lower left to fill this otherwise empty space.

Anson Herrick has five prints, all of which deal with play of sunlight and shadow in a masterly way. The "15th Hole" reproduced in this number tells its own story—composition, technique, interest, all equally well worked out. You will all agree that it is not lacking in contrast.

Ewing R. Stiffer, a new worker, sees an opportunity and takes it. The figures are not posed in "The Steam Fitter". There is fine placing of dark against light.

Wayne Albee's "Shadows" has a fine well-placed girl and parrot with its surroundings of shadows. The young lady is perhaps a little too stiff and obviously conscious of having her picture made.

"The Visiting Nurse with the New Baby" by Laura Gilpin is an interior of tots and nurse well grouped, showing extreme human interest.

"A Frog He Would a-Wooing Go" by Walter Rutherford shows more originality than any other print in the Exhibit. It is full of humor and interest.

Chas. H. Brown shows five prints of interest. "Air Castles" would be a much better picture if there had been a few cigarette-butts or papers on the floor in the lower left so as to carry the eye to the hanging object and then back again to the figure.

"Miss S. W. A." by Clare J. Crary is a difficult subject well handled. It is a three quarter length of an artist at work surrounded by canvas, easel, door and table.

N. S. Wooldridge's "The Market Place" is a fine example showing what can be done by "shooting" into the lights by one who understands his lens.

"Summer Sport" by Otis Williams is too flat, lacks contrast.

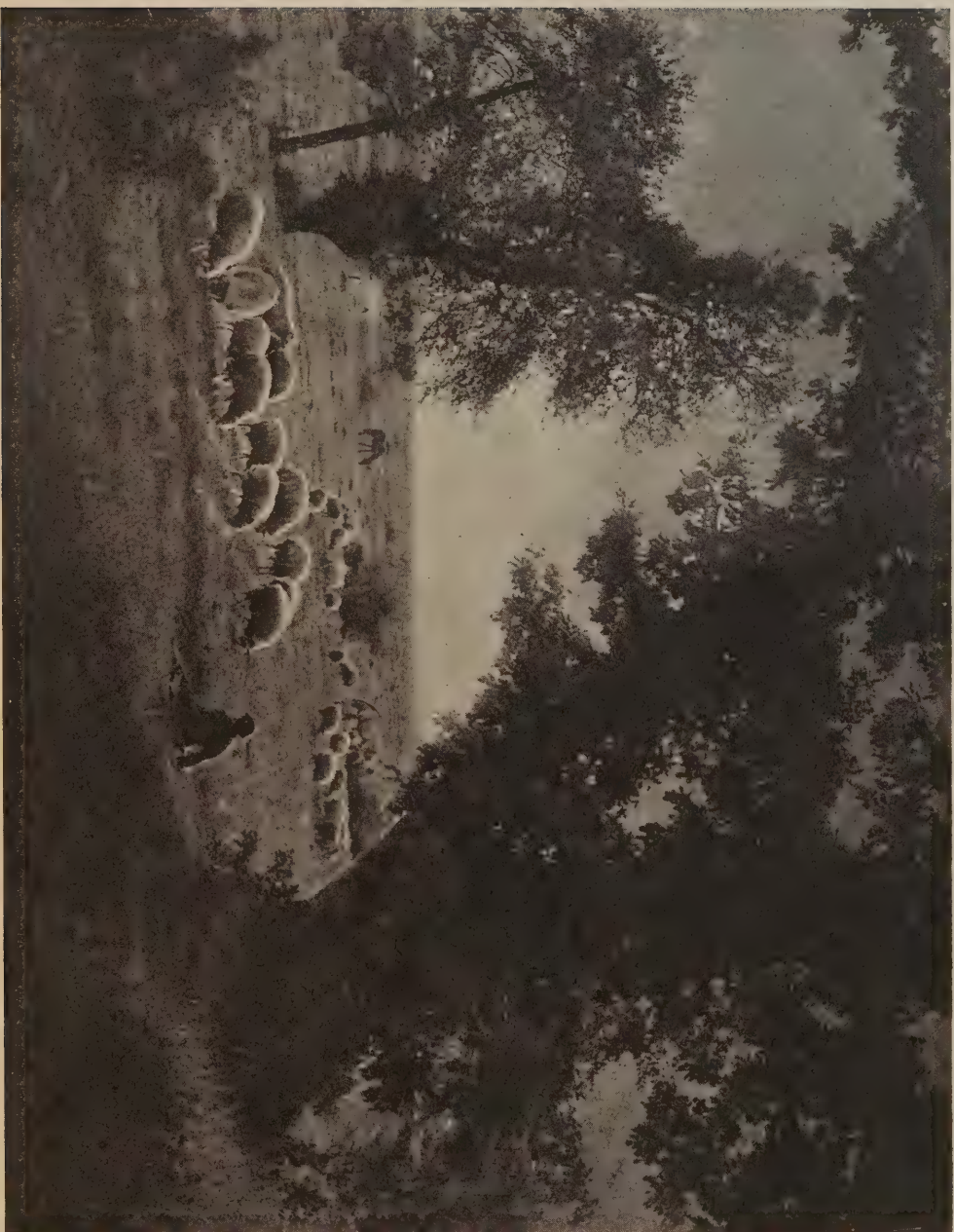
So much for the prints reproduced, and others of similar type. We will now consider other types of prints which contributed materially to the show. We will first consider portraiture. There are some fine examples shown.

Mme. d'Ora Bonda has five portraits all of which show care in arrangement, detail and technique.

Lionel Wood's portrait of Miss Hawthorne Wood, reproduced in the catalog, is so well known that it only needs to be mentioned here. . . . "The Sweep" is a very commonplace subject, well handled.

Robert Frazier, a beginner in exhibition-work, has a fine low key picture in his "A Latin Type."

"The Captain" by William Gilchrist is a figure well placed in the doorway with all other parts subordinated to lead to it.



PASTORALE

TWELFTH ANNUAL PITTSBURGH SALON

E. OSTERLOFF

Clare E. Sipprell has a fine understanding of character as depicted in "Ivan Mestrovic" and "Ivan Moskvina as 'Luka'".

"Sheila" and "Monica" by Monte Luke of Australia are both examples where dark against light are well managed to concentrate. "Sheila" is a portrait of a young girl in a dark Toque, dark ribbon over the shoulder, thus framing the face.

"The Portrait of Lady U" by Anatolio Trapani of Argentina is a red gum,—very sketchy and full of feeling.

ly well named—a little girl sitting—her head and shoulders outlined by the round back of an old-fashioned chair which supports her. This is again supported by the dark ribbon around her head.

"The Sampler" by Mary Raymond is well done. It is a delicate palladium print containing a wealth of detail in the old-fashioned gown and sampler which adds to the whole picture.

Cyril R. Rosher's "The Lace Cap" is the best high-keyed portrait on the walls. His "The Wise Man of the East" gives one the feeling of



THE 15TH HOLE

ANSON HERRICK

TWELFTH ANNUAL PITTSBURGH SALON

J. Vanderpant's "A Son of the East" is a large head, well done. It shows all of the dignity and bigness that this subject should.

Nicholas Muray has a very striking thing in his "Joseph Schildkraut."

William A. Misuraca is a bromoilist of recent date. His "A Peon" is a fine character study.

"Mitza" by Eugene P. Henry is one of the few bromoils which shows that this medium is a control process. Everything has been well subdued to have this fine portrait of the dog stand out.

W. C. and T. M. Jarrett certainly know how to portray little children in a simple, happy mood.

"Peggy" by George W. Harrold, Jr., is extreme-

viewing a giant, due to the head being too large.

"Hank Aabel" is a fine character study and the artist, Aage Remfeldt, can feel that it is the best portrait in the show. It is a typical Franz Halz.

Arthur Kales has five bromoil transfers of wonderful quality and texture.

The two portraits by Louis Fleckenstein are enriched by the touch of the color he gives many of his prints.

James Doolittle's "Portrait in High Key" is very sketchy in effect, but hardly high key. His "Chinese Portrait Study" is a fine head of an old Chinaman where a natural background of a door with arches is well used.



HINDOO PRINCESS
LAQUAN I. NAKAYAMA
TWELFTH ANNUAL PITTSBURGH SALON

We will now consider a few figure-studies. There are few which are interesting. Gilbert B. Seehausen has two semi-nude figures with lighting obviously too artificial.

Dorothy Wilding's studies have a fine feeling of flesh quality and roundness of figure.

"Springtime" by A. S. Workman is exactly what its name implies. It is a dainty, dancing-figure, with flute, filled with grace, springtime, movement. Perhaps the camera was a little too low, but the rest compensates for this.

"The Sun-Bath" by F. A. Kunishige impresses the writer as the best of the nude figure-studies.

Alice Boughton's "Chrysanthemum", an excellent high-key print. The quality of the satin of the costume of Pierrot is the best I have ever seen.

There are few worthwhile still-life pictures. Probably the best is one by Laquan Suzuki. "The Trophy" by F. Y. Ogasawara shows two centers of interest—the hanging basket being, if possible, of more importance than the trophy. By cutting one-fourth off the top and an inch and one-half at the left the print would have been greatly improved.

C. N. Sanchez, Jr., has five prints. His two still-life studies are his best.

Wilbur E. Taylor's "Black Vase" is worthy of comment.

In portraying industrial subjects, Charles Lederle probably is at his best. Of his four prints, "Arches and Horses" appeals most. It is an excellent bromoil with beams of light worked in—but well done.

"The Ladle" by Norman G. Reiss is finely conceived but would be greatly improved by breaking up the immense dark space in the upper left.

There are three men dealing with smoke-stacks and smoke in a fine but entirely different manner. First we see Henry A. Hussey in his masterful treatment of reaching the building-tops and smoke in his print "Gas Tanks." The vertical supports of the immense tanks lead one most effectively into the picture. Some one said "Soho, Pittsburgh" by Benjamin

W. Robinson, was a busy picture, but that is what the river-fronts of Pittsburgh are. The three dimensions are well defined. The smoke-stacks are well placed in the middle distance so as not to be monotonous and the whole is surmounted by the arch of the bridge. Clark Blickenderfer's "City Smoke" is the direct opposite—one tall smoke-stack with its small jetty of curling smoke balanced by one lone figure on the bridge in the foreground and overlooking the City.

Dr. Arthur Nilsen in "Under Control" has become a rival of William Zerbe in portraying fighting fire in New York City. Both have interesting prints.

There are so many water-pictures showing parts of boats that it is impossible to make mention of them all.

Paul Wierum's "End of the Quest" is one of the best. It is well chosen—the old abandoned part of the boat against the sky.

Francis D. Libby's "Barges—Pittsburgh" shows the barges in real Pittsburgh atmosphere.

Marie Riggins' "Rocky Point" gave great relief to find boats without tops cut off. It is a fine small palladium print well executed in every way.

"Count" Reuben Azdherian has two prints shown. He is better in "Court Street on Winter Night." The camera was so placed that all glaring lights are well hidden—the rays falling on the sidewalk of snow giving a pleasing arrangement of light and dark—thus leading up to peaceful houses.

Fred Judge's "Night in Regent Street, London" is full of the spirit of that ancient thoroughfare, so interesting at any time and especially so when night gives an air of mystery to its historic structures.

Forman Hanna has four of his characteristic Arizona scenes done in the way of which he is a master.

Thus endeth our impressions of the Twelfth Pittsburgh Salon, a banner exhibition reflecting credit alike on the contributors and the management of the exhibition.





A GLOW IN THE WEST

WILLIAM S. DAVIS

When the Sun Is in the West

WILLIAM S. DAVIS



LONG shadows; silhouetted tree-forms against a glowing sky; dark cloud-masses fringed with yellow and gold; an amber-toned symphony when the sun's disk is seen through a thick haze; a trail of radiance upon a sheet of water—these are some of the effects associated with the hours when the sun is in the west and day draws to a close.

Color being, as a rule, a notable element in late afternoon and sunset-effects the average amateur may wish to know what advantages, if any, attaches to using a camera when the strength of the light is considerably less than during the middle of the day and the color-effects cannot be captured by ordinary photographic processes. The answer is, to take advantage of the peculiar tonal quality and the wonderful massing of light and dark tones, which are as much a part of the general effect as the coloration. Look, for example, at an average landscape under the rays of the noonday sun. In summer, especially, the foliage will be seen to be sprinkled with glinting

spots of reflected sunlight, and what shadows there are appear intensely dark, a combination that conveys an impression of harshness. Observe the appearance of the same, or similar, material shortly before sunset and note how the nearly horizontal rays of the sun lend a soft radiance to the foliage in full sunlight, affording a pleasing contrast to the velvety-soft shadows that cover much of the space. The distance seems ready to melt in with the delicate tones of the sky, the whole giving an impression of mellow richness which not only is beautiful to behold but makes a beautiful picture when properly translated into monochrome by means of a camera.

In addition to the attractive range of tone-values associated with late afternoon, many subjects show, on sunny days, long cast-shadows. Both shadows and massing of the dark tones may be of great assistance to the pictorialist—the amount of middle and dark tones making possible the placing of the tone-accent in the lighter parts without loss of breadth and general harmony;



THE LIGHTSHIP

WILLIAM S. DAVIS

and the cast-shadows, when in the foreground, often furnish just the touch necessary to balance some dark spot in another part of the scene.

In offering suggestions upon the treatment of late-afternoon effects, it seems best to group the different phases into well-defined classes and consider each class separately. Landscape-material on a sunny day, and with the sun at one side or a little in front of the spectator, represents, from the technical point of view, the easiest class to handle. When a group of trees in foliage forms the principal feature, the division of the subject into broad-lighted and shaded areas gives one an opportunity to produce a composition that possesses much dignity and beauty, provided the areas of varied tones are so disposed within the borders of the picture-space that they form a well-balanced and interesting mosaic. A strongly-shaded foreground not only adds to the apparent luminosity of the middle-distance and distance but increases, as well, the sense of recession or separation of distant parts from nearby material. Cast-shadows projected by tree-trunks, buildings, and other objects, sometimes form patterns that are both beautiful and curious when thrown upon a suitable surface, such as a grassy field, roadway or expanse of snow. Material of this kind may well

be used in the production of novel foreground-studies; but as a rule it is advisable to include with the shadows some tangible objects of suitable character to suggest the source of the latter and to furnish an effective foil for the more elusive shadow-pattern. Cast-shadows are ordinarily seen at their best when the sun is from one to two hours high, unless the chosen spot is much shut in.

As regards the technical treatment of the subjects mentioned, the most important is to give the plate or film sufficient exposure to ensure the finished negative possessing a soft, full scale of gradation throughout. In estimating the length of exposure necessary to do this one should keep in mind not only the greater proportion of shadow commonly encountered, as compared with what is normally visible nearer the middle of the day; but the falling off in the actinic—photographically active—power of the light as the sun gets lower, this decrease in power being greater than the loss in visual intensity. Such is particularly the case when the sunshine is very yellow in color, a condition that usually accompanies a hazy atmospheric condition. On account of the frequent discrepancy between actinic power and visual brightness, it is advisable to use an exposure-meter of the Watkins or

Wynne type, that measures the actinic power of the light by means of special sensitive-paper. If, however, reliance is placed upon judging the relative intensity, it will be safe to allow three to four times longer exposure an hour before the sun sets than is necessary during the brightest portion of the day, and eight to ten times longer when the sun is near the setting point, assuming a reasonable amount of detail in the shadows of fairly near objects is aimed for. Should the

ing like a ball of fire as it sinks to rest through a golden haze; a pathway of light over a body of water, and trees or hills showing dark against the glow in the western sky, are representative subjects. Nearly every subject when seen against-the-light exhibits two distinct groups of tones: 1st, what might be called the highlight group, formed by the tones in the sky, the water and, in certain winter-scenes, the fields of snow or ice; 2d, a low-toned group, composed of dark mate-



AS EVENING APPROACHES

WILLIAM S. DAVIS

light be *very* yellow, these figures may have to be increased from fifty to one-hundred per cent.

On a bright afternoon the employment of a light-yellow filter over the lens is generally beneficial in the case of landscapes and coast-scenes. It helps to hold the tones of the sky in their proper place in the tone-scale of the picture, besides preserving light clouds, when such are present. When the light is quite yellow in tint, it acts in much the same manner as a ray-filter; consequently, in such circumstances a filter can be dispensed with.

Against-the-light effects are without doubt the kind most commonly associated with a sunset-lighting. Striking cloud-forms with sunshine streaming through the thin edges; the sun appear-

ing like a ball of fire as it sinks to rest through a golden haze; a pathway of light over a body of water, and trees or hills showing dark against the glow in the western sky, are representative subjects. The range of contrast between the light and the dark groups of tones makes it somewhat difficult to obtain an adequate rendering of the gradations in both groups simultaneously, the problem presented being to obtain enough detail and gradation in the dark parts to make them appear transparent and atmospheric in the finished picture without damaging the rendition of the lighter tones by excessive exposure. The difficulty of obtaining the necessary scale of tones is reduced to the minimum in a subject where very dark objects are absent, or are placed a considerable distance from the camera, as in



THE GATHERING STORM

WILLIAM S. DAVIS

our illustration "The Lightship". In this example the tone of the vessel was modified by the diffusion of light from the surface of the water, as well as by its distance from the lens. When dealing with a subject of this type the small amount of dark tone can practically be ignored and the exposure timed to suit the sky and water. A ray-filter need not be used, which is a fortunate circumstance for the marine photographer, as it is not always possible when working from a moving vessel to allow the longer timing needed on account of the danger of getting a blurred image.

When there is a strong cloud-effect, an open shore-scene or a landscape with light foreground may be photographed fairly well without a filter by giving just enough exposure to penetrate the darkest portions—then developing carefully, preferably in a rather dilute developer, to avoid blocking up the sky. This is shown in "A Glow in the West"—which, by the way, was given twenty times longer exposure than the negative of "The Lightship" under similar atmospheric conditions—and "The Gathering Storm", the latter photographed in circumstances that precluded the employment of a filter. In both instances, however, the diffused quality of the light as well as the well-defined character of the clouds lessened the difficulty of getting the sky and foreground in satisfactory relationship. Even so, a negative made without the aid of a ray-

filter usually shows a difference in printing speed between the land and sky portions, which makes it necessary to do some "dodging" while printing; or, as an alternative, either reduce locally the sky of the negative or stain the thin landscape-portion with yellow aniline dye to retard the light-action.

All things considered, it is certainly best to employ a suitable ray-filter when it is not necessary to place a limit upon the length of the exposure, since the normal effect of a yellow screen is to hold in check the light-action in the sky-portion of the negative, making it practicable to give the darker parts of the subject an adequate exposure without detriment to the rendition of the sky. Such a comparatively light-yellow filter as the Ingento series A, for instance, is sufficiently strong in action for many subjects, and increases the normal length of exposure only four to five times when used with an orthochromatic plate or film.

The most difficult type of against-the-light subjects to preserve the shadow-gradations of are undoubtedly those in which groups of trees or tall buildings occupy a large area of the picture-space, with a brilliantly illuminated sky for a background. In dealing with a subject of this type a strong filter is needed; and, if a plate is used it should be double-coated or backed. The best plan is to employ a panchromatic plate or

cut-film with a filter that gives full correction, such as the Wratten K3. The next best procedure is to use an orthochromatic emulsion and a filter of the K2 type, that lengthens the exposure from twelve to fifteen times.

A mechanical method of getting around excessive differences in contrast between the sky and the land is to make two negatives of the scene, timing one to suit the sky, and the other to suit the dark tones in the landscape. When finished, the landscape-portion of the negative timed for the sky is blocked-out with opaque, and the same treatment applied to the sky-portion of the negative exposed for the landscape. Then a combination print can be made by using the two negatives successively in register. This method is of most value when the extremes of contrast are very great, and when clouds are moving so rapidly upon a windy afternoon that

they would be blurred in the image during an exposure of sufficient duration to record the dark portions of the scene.

To prevent general fogging of the image when facing toward the light upon a clear day, one should try to keep the direct rays of the sun from striking the front surface of the lens. When the sun is high enough to be outside the field of view included, a lens-shade is the most effective instrument that can be employed; but extraneous light may be excluded by holding a plateholder slide or one's hand in the proper position, though this involves a little risk of cutting off a portion of the image should the shade be held too close to the lens. Sometimes, it is possible without harming the composition to get an opaque object, such as a tree-trunk, to come between the sun and the lens. No special precaution is necessary on hazy days, or when the sun is close to horizon.

Questions and Answers in Darkroom-Procedure

ED. C. JERMAN

Part III

38. *How long may a fixing-solution be used?*

Answer: Until the time of fixation becomes unreasonably long, or until there is a tendency to stain.

39. *How should the fixing-bath level be maintained?*

Answer: By adding fresh fixing-solution.

40. *May stock fixing-solution be kept in bottles for future use?*

Answer: Yes, for any length of time, as it does not deteriorate with age.

41. *In what way does cleanliness affect the fixing-solution?*

Answer: Freshly made fixing-solution should be skimmed until there is no scum on top of the solution, and should be kept covered at all times when not in actual use. The tank should be kept clean. Skum or dirt, if not removed, may cause spots or streaks to appear on the film.

42. *What attention should be given to the wash water?*

Answer: The wash water should be free of sand or grease and dirt of any description. It is difficult to remove any of these once attached to the film.

43. *What attention should be given to the drying of films?*

Answer: Films should be dried in a warm

place with circulating air free of dust and dirt.

44. *Between what degrees of temperature may development be best carried on?*

Answer: Between 65° and 70° F.

45. *What should be the temperature of the rinse water?*

Answer: As near the developing temperature as practicable.

46. *What should be the temperature of the fixing-bath?*

Answer: As near that of the developer and the rinse water as practicable.

47. *What should be the temperature of the wash water?*

Answer: As near that of the other solutions as practicable.

48. *What should be the temperature for drying?*

Answer: Between 35° and 90° F. A clean, dry, moving atmosphere at a temperature of about 80° is very satisfactory.

49. *What is the proper time of development for a correctly exposed film?*

Answer: Five minutes at 65° F. is standard.

50. *What is the proper time for rinsing?*

Answer: About 5 seconds.

51. *What is the proper way to rinse a film?*

Answer: Keep the film moving by raising and lowering in the rinse water.

(To be continued)



PHOTOGRAPHIC DRAFTING

U. S. AIR SERVICE

U. S. Army Air Service Technical School Photographic Department

THE Department of Photography is one of the three main departments which compose the Air Service Technical School of the Army situated at Chanute Field, Rantoul, Illinois. The mission of the school is to train all the enlisted specialists of the Air Service; and, in addition, two of the types of specialist officers, namely; communications, or radio, and photographic officers. The school is the result of the consolidation in 1922 of three separate schools known as "The Air Service Mechanics School", "The Air Service Communications School", and "The Air Service Photographic School". The courses at present given in the consolidated school are designed to fit young men for one of the following specialties; airplane mechanic, automobile mechanic, engine mechanic, machinist, electrical ignition worker, metal worker, fabric worker, draftsman, cabinet-maker, blacksmith, oil-reclaimer, parachute-rigger, radio-mechanic, radio-operator, commercial photographer, newspaper photographer, aerial-photographer and motion-picture camera operator. These courses vary in length from six weeks to nine months. They are thorough and up-to-date and are given by the best of instructors with the best of equipment.

The organization of the Department of Photography is as follows:

Director, Captain William D. Wheeler, A.S.

Assistant Director and Supply Officer, 1st Lieutenant Ployer P. Hill, A.S.

Instructors, 1st Lieutenant James W. Hammond, A.S., 2d Lieutenant L. H. Dawson, A.S., Mr. Charles L. Vance, Mr. Gerald E. Grimes, Master Sergeant Pearl H. Hammer, Master Sergeant Charles C. Leiby, Staff Sergeant Grover B. Gilbert, Staff Sergeant Arthur L. Witman, Staff Sergeant Raymond L. Oakes, Sergeant Francis E. Noel, Sergeant Lloyd W. Green, Corporal Roy L. Deem.

Enlisted Specialists, Staff Sergeant Howard H. Williams, Technical Supply Sergeant; Sergeant Albert E. Wespetat, Camera Repairman; Private Stanley P. Pejaszek, Chief Clerk; Private Richard Danko, Storekeeper and Supply Clerk; Private Earl McClure, Assistant Camera Repairman.

Four distinct courses of instruction are given in the Department of Photography; one for commissioned officers of the Regular Army, approximately nine months in length; one for commissioned officers of the Reserve Corps and National Guard of three months in length; one

for enlisted men of the Regular Army of six months in length, and a special course in motion-picture camera operation for selected non-commissioned officers of the Regular Army of eight weeks in length.

The course for enlisted men, which is the basic photographic course, includes the mathematics involved in photography, the principles of photography, negative-making processes, photographic chemistry, printing-processes, lantern-slide making, photographic optics, cameras, practical ground-photography including newspaper and commercial photography, copying, filters, the

gressional appropriations it is not possible to continue a National Guard or Reserve officer in active service beyond three months.

The special course in motion-picture photography for selected non-commissioned officers of the Regular Army embraces theoretical kinematography, motion-picture camera operation and maintenance, motion-picture laboratory apparatus and methods, practical kinematography on the ground and from the air.

Aërial photography for military purposes as practised in the Army today may be properly said to have been discovered during the World



AËRIAL PHOTOGRAPHIC MOSAIC MAKING

U. S. AIR SERVICE

work of a photo-section and mosaic-making. The course for commissioned officers of the National Guard and Reserve Corps includes all the subjects enumerated with the exception of mathematics and with the addition of practical aërial photography, the military uses of aërial photographs and photographic interpretation and aërial intelligence. The course for commissioned officers of the Regular Army includes all the subjects embraced in the course for Reserve and National Guard officers with the addition of a brief course on elementary topography. However, the principal difference between the two kinds of officers' courses is that in the case of officers of the Regular Army considerably more time is devoted to each subject than it is possible to do in the case of National Guard and Reserve officers for the reason that under present Con-

War. It was introduced in our army during the summer of 1917 by the advisory officers especially sent to this country by our allies. To avoid delays incident to the discovery of shortcomings and defects in newly invented apparatus, commonly called "bugs", the policy was followed of copying the photographic apparatus of the allies which had proved satisfactory from thorough and extensive use. It was really not until after the Armistice that the genius of American invention began to make its impress upon aërial photography and from the Aërial Photographic Section of the Air Service Engineering Division at McCook Field, Dayton, Ohio, under the genius of Captain Albert W. Stevens, A.S., and with the help of his corps of able assistants, and the hearty co-operation of American manufacturers, there have been in-



PREPARING MOUNT FOR PHOTOGRAPHIC MOSAIC

U. S. AIR SERVICE

vented and perfected cameras, camera accessories and laboratory apparatus and materials especially designed for all phases of aerial photographic work that have placed aerial photography in the Air Service in the front rank of aeronautical development. As a consequence, the quality of aerial photographs now being made throughout the Air Service is far superior to that possible to obtain with apparatus used during the World War, and moreover, by reason of the perfection of aerial film, photographs can be successfully made from the air that would not have been attempted during the great conflict.

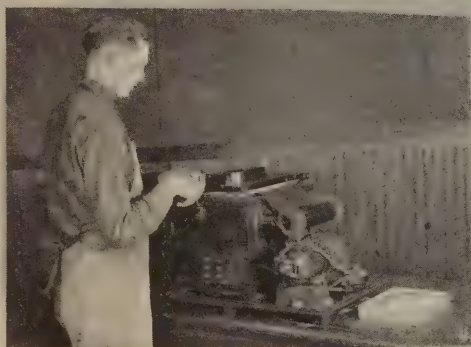
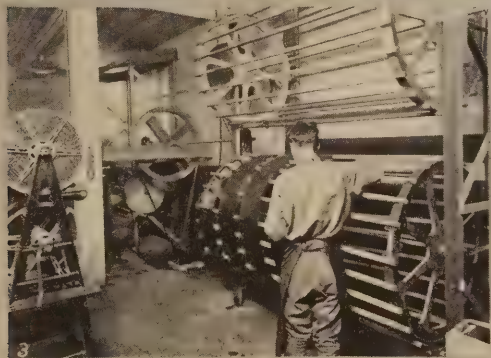
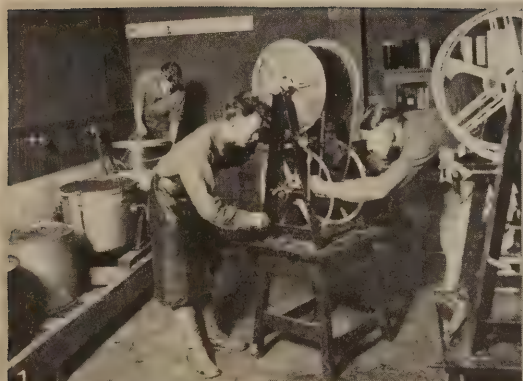
Fortunately, the Air Service Photographic School is but two hours by air from McCook Field and therefore it has been possible for the Engineering Division readily to transfer the knowledge and experience it has gained in aerial photographic development work to the School and as a consequence excellent courses in the very latest phases of aerial photography have been built up in the school so that at present, certainly so far as these courses are concerned, there is no similar school in this country, or perhaps, in the world.

Forty-six officers and enlisted men of the Air Service of the Regular Army are now taking the photographic course. The officers were especially selected for this course from the graduates of the Air Service Advanced Flying School at Kelly Field, Texas. They are all enthusiastic flyers, alert, and interested in photography.

Information at this time concerning the course in photography given in this Department is valuable because at present there are a limited number of very desirable vacancies in the photographic branch of the Air Service which will go to the right kind of men after they have been trained in photography in this School.

Photographic work is as interesting as it is profitable. Aerial photography is a new profession and this is the only school that gives training in it. The photographic course in the Air Service Technical School also fits the student for other kinds of photographic work. In a word, it gives him a good bread-winning profession upon which he can rely at any time for his livelihood.

This is the age of specialists and every man must have a specialty; preferably several. Some of these specialties he may never use; but they are assets to him and a reserve upon which he can fall back in case of necessity. To be successful, therefore, a man must possess a certain amount of a particular kind of knowledge and skill. The question invariably asked an applicant by an employment-manager is: "What can you do"? If the applicant has had the necessary training and can say that he is competent to do a certain piece of work, or to fill a certain kind of position, he succeeds in obtaining the job. On the other hand, if he can only state that he has had some experience along certain lines, but no training for the position sought, he is



1. Developing Aerial Film

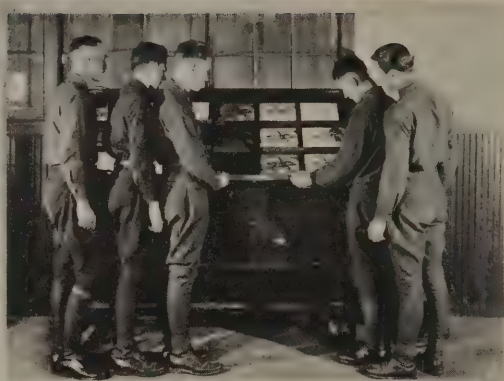
3. Drying Aerial Film

5. Preparing Photographic Solutions

2. Transferring from Developing-Reel Drying-Drum

4. Printing Aerial Film

6. Negative-Making



7. *Photographic Chemistry*
9. *Contact Printing*
11. *Copying*

8. *Instruction in Negative-making*
10. *Filling Airplane-Camera Magazine*
12. *The Darkroom*

told that his application will be considered, which is really only a polite way of informing him that he has failed to obtain the position.

The photographic course in this Department includes lectures, demonstrations and practical laboratory work in the following subjects: elementary photography, negative-making, photographic chemistry, photographic printing, optics, cameras, newspaper and commercial photography, copying, filters, photographic mosaic-making, and the work of an Air Service photographic unit. The course begins with the rudiments of photography and is developed to a point where the instruction embraces thoroughly practical and interesting training in most of the important photographic processes.

The Department of Photography is well-equipped with commodious and up-to-date laboratories and work-rooms, with the latest and finest types of cameras, lenses, and photographic apparatus; and, at all times, it has an adequate supply of photographic chemicals and other necessary materials. Much of the time of the students is consumed in the actual making of the photographs and the theoretical side of the subject is gone into only to an extent sufficient to give the students a better understanding of the photographic operations being taught.

The photographic course comprises twenty-four weeks of instruction. A successful graduate is then sent to one of the photographic units of the Air Service known as a "Photographic Section". At this time opportunities for rapid advancement in a section are good and, therefore, those coming to this school at the present are more certain of promotion than those arriving later.

The Air Service Technical School is situated at Chanute Field, Rantoul, Illinois. Champaign, Illinois, is seventeen miles away; Chicago, one hundred and fourteen miles; and Indianapolis, about one hundred and twenty-five miles. Rantoul is on the main line of the Illinois Central Railroad from Chicago to New Orleans. There is also an electric line between Rantoul and Champaign on which frequent trips may be made.

Chanute Field is a large military post and is

equipped with a gymnasium, service club, tennis-courts, open-air swimming-pool, running tracks and football and baseball fields, as well as two excellent libraries.

As the Air Service Technical School is one of the Army special service schools, it is necessary that the applicant enlist in the Air Service of the Army in order to obtain training in the school. Those desirous of taking the photographic course prescribed should not only be able to pass the usual physical and mental recruiting tests, but should have at least eight years grammar school and two years high school education, or its equivalent. A fair equivalent of such schooling has been found to be practical experience in one of the following lines of work: chemistry, laboratory work, motion-picture development, amateur photography, blue-printing and pharmacy. The applicant must be genuinely interested in photography. It has been found that those most successful in the course have such an interest in photography or similar work. He should also be possessed of a good degree of intelligence and be capable of understanding the fundamentals of physics and chemistry. An even temperament, conscientiousness, carefulness and preciseness in minute details, should also be characteristics of the desired type of applicant.

Visitors are welcome at any time at Chanute Field. Those who desire to enter the course should see the Recruiting Officer at the field or talk the matter over with their local recruiting officer. Here is a golden opportunity. Remember, only a limited number of enlistments have been authorized.

[We are greatly indebted to Captain William D. Wheeler, Air Service, Director of the School, for the information contained in this article and for the illustrations which aid the text so materially. As the Editor is a Captain, Signal Corps, Res. U. S. Army and as his special assignment would be the Photographic Section of the Signal Corps, our readers may readily understand that this article was of great value to him; and it will be to others who did not know that Uncle Sam has such a splendid school for those who elect to serve him. EDITOR.]





THE GREAT OUTDOORS

WM. T. ADDERLEY

Bill Becomes a Camera-Enthusiast

WM. T. ADDERLEY



MY DEAR JACK: I was in a deplorable state of mind on receipt of your letter in which you so alluringly portrayed the wonderful experiences and real joys awaiting the possessor of a camera. Hiking to the mountains and lakes, and there photographing the many wonderful beauties of nature, appealed to me as an antidote for my lost hobby, the rod and fly, which you know has been hopelessly ruined since the vast influx of Fords. Your letter certainly sounded good to Willie.

The prettiest compliment I can pay you, is to say: I followed your advice. I'll say I did. But, Old Dear! When we meet, it's the hypo for yours! I will add, that the Old Gentleman Joshua, of whom Dad used to read to me from the Bible, had a small job when he waved his three-section tripod and commanded the waters of the Jordan to cease, compared to what I have experienced in my struggle for an "Honorable Mention". I'll go further, the O. G. sized up like a V. P. Brownie along side an F/4.5 Anastigmat. After religiously studying thirteen catalogs from cover to cover, I could almost sing them backwards to the tune of: "A Mother Was Chasing

Her Boy 'Round the Room". I even dreamed of Rectilinears; Anastigmats; Flat Fields; Hyper-Focal; Infinity; Pyro, and Hydroquinone. However, don't allow my knowledge of these subjects to surprise you, I merely wish to convince you of my progress and that I am familiar with my subject. I finally decided on a Paragon Ilex F/4.5 fitted to a 4 x 5 Korona View, the appealing factor in my choice being speed coupled with its moderate price. However, before accepting the lens I made an exposure on a moonlight-scene, and will say that any lens that not only gathers in the moon-path, foreground, and registers clouds, through and around the moon in one exposure, is *some* lens. My only vital mistake was in having the lens fitted to a foreign "Kola-punk" shutter which I have long since discarded for an Ilex.

You remember our old attic where we gathered to swap stories, mend our fishing-tackle, etc., well it would have made an ideal darkroom, with the exception of the floor. That floor had evidently been surveyed by some amateur through a twenty-four inch F/3 lens; the foreground was well composed, but the lack of unity in the middle and distant boards was appalling. As it

happened, the first and only night that I used said attic, I made up a gallon or two of pyro and in attempting to move the P.D. in the dark, my feet became entangled with a clothes-basket, and at the finish the darn developer beat me to the floor by 1/113 of a second on an F/22 stop. After picking myself from the débris, I turned on the 150-Watt lamp to get my bearings. Holy Smoke! About the first clear view to register, showed a full dozen perfectly and thoroughly exposed plates on which I had just put in a bad half hour

spective and a faintness stole o'er me when I saw the Eastman film curling from my M—in L's optics. It was perfectly obvious that I was shy on glycerine, and for a genre study two figures were superfluous, so pressing the cable-release I put in a slide for the basement. After some worried interval, I heard, with relief, Madam tell my wife that she would sleep in the spare room for which I held her blameless. When I thought the storm had passed, I commenced my retreat for the old tent.



VEILED MOUNTAIN

WM. T. ADDERLEY

while extracting them from their holders. While meditating as to whether the 150-Watt had had any effect on plates which had already received a full exposure through a lens, I heard a faint yell, for help, from down stairs. I hurried below; and, just as I reached the lower landing, my mother-in-law appeared *déshabille*. Oh Man! That attic floor was never intended for fine work, those half-inch cracks surely put me in bad. You know that voluminous Baby-Blue Kimono that madam wea—but on second thought I'll say you have never seen that "B. B. K." However, I was stunned as I made a hurried focus on the transformation wrought. It looked like nothing so much as a thirty by forty Bromide that had just been lifted from a hypo-alum sepia bath of 120 degrees temperature. I sized up the per-

The noise that would be made by two skeletons dancing on a tin-roof was mild compared to the terrific crash which followed. I thought that this was surely the end of the end. Old Dear, that pyro was surely not diluted more than one half of a grain; in fact I'd say it was just a bit over one hundred per cent. efficient and was working overtime. After soaking the plaster thoroughly, said plaster weakened and fell like a tired dog. You remember the time you made the dozen beautiful 11 x 14 enlargements and after putting them in the wash they developed close to thirteen various sized blisters to the inch? Well I felt just as badly as you did, only fifteen times worse. Just then the lights flashed on, recalling some instructions for beginners wherein I read: "The brighter the light, the smaller the stop" and I'll

say my stop was some small, I knew it was no place for an amateur, so I opened the shutter and filtered through the window. You know, Jack, a fellow desires to stand well with his wife's mother, especially when she is such a dear old lady, so realising how one would feel after a pyrobath under protest, I gathered together my camera and fishing-paraphernalia, penned a hasty note that I was on my way, took an earlier train than my plans called for, for Cultus Creek on Kootenay Lake.

The following morning started up the creek, hoping to get pictures which I knew would make them all sit up and notice. I'll say I *started!* Now, Old Boy, for some hard luck. A blacksmith of this age doesn't know the definition of the word. My first subject was a distant cliff. Here was an opportunity to use the rear combination. Unscrewing the front lens, I prepared to line her up. Am a lucky cuss that I didn't make that exposure before trying the shutter, 'cause the darn shutter refused to open. I talked to the thing nice and softly; squeezed the bulb until I took on the color of a fifteen-times filter, and got three corns on my thumb, all to no avail. Finally decided to take shutter apart to locate trouble. I took it apart all right, a *part* is right or about ninety-seven parts. Removing the front combination I turned to place in case, when the off hind leg of tripod moved squarely in front of my left No. 9, over goes Mister Camera—Blooney! That was surely some haggard looking box after she hit terra firma. The front board severed connections with the box entirely, broke both rivets out of side arms, capping the climax by having a healthy young knot poking its way through the shutter-leaves. Man! Oh Man! I was some plumb disgusted, I surely was. Did I give up? You know me, Jack, when I start something since I became a student of Mental Science. Thoughts are things, so I commenced to think aloud. I then spread the focusing-cloth on the ground and proceeded with the operation. *Some operation* is right. It consumed about eight and a half minutes to dissect the "Kolapunk" and four hours and twenty-three minutes to get part of it together. The gink that got that shutter together in the first place should have his picture done in a scarlet gum fuzzy type, and have it hung in the Philadelphia Salon, I'd see it if I had to ride the blind end of a mail car to get there. If he hadn't had any more springs in it than a Ford has, all would have been well; but when I got to where I thought I was through, I had three foreign springs, and five small screws minus holes for same. There were a couple of sour dough prospectors came up while I was perspiring on the job and I'll bet a dozen Ortho-

Non-Alcoholation plates against a half pound of Acid-Hypo that those guys slipped me that bunch of springs and screws while I turned to blow my nose. I'll repeat, your intentions may have been for the best, but you surely started something when you said *Camera*.

Assembling the wreck I started back. On the way I lost my knife, the one you gave me in 1912, but as this was its thirteenth year I figured she was due to go. In crossing the stream, slipped on a boulder, made a clean rip on right trouser leg from waist to ankle, in attempting to retain my balance, must have thought I was using a duplicator, as I repeated on left, so it looked as if all I had on was a belt. It was what you might call a full, or almost an indecent exposure. Had to cut off several yards of perfectly good enameled fishing-line to close the opening to about an F/22 to eliminate over exposure. Returning to cabin, discarded my wet clothes and just as I leaned over to pick up my dry union suit, Man! Oh Man! A fully developed, nasty dispositioned "he" hornet, the big black style, approached from the rear, launching a graceful flash-light drop-kick, he hit me just once. *Once* was a plenty. If the folks at home could have seen me then! Broken Camera; lost knife; pantless and stung. Oh Dearie! I was surely feeling blue. Breaking off a piece of Pittsburg stogie, succeeded in getting it in a saturated solution, I applied same to the stung-area which began to ease up in about the same period it takes to fix an over-developed double-coated plate. (Note—The highbrow that sold me that shutter told me the shutter would have worked all right if I had *only* set the gosh-darned thing.)

To continue seriously, I am truly grateful for your suggestion, for my camera has shown me a new vista of unsuspected joy, which I liken to the Agate, in the language of gems, ensures health and long life, for where can one find a more delightful or cleaner hobby than picture-making. True to my previous photographic outings on Kootenay Lake, there has always been some outstanding feature which is thereafter associated with that individual year. It may be a certain picture, or some unusual experience and last year proved to be no exception. So my thoughts carry me back to my last trip on which I had the great pleasure to meet Captain Douglas Brown, a man of sterling qualities and charming personality. As we lounged on the deck of the "Nasookin" with our favorite briers, we watched in contentment the reflected beams of light on the water from the shoreward houseboats, while rushing here and there were innumerable small launches with their twinkling lights which one could easily



A MOONLIGHT EFFECT

WM. T. ADDERLEY

imagine were the witches in their quest for Poor Tam O' Shanter; just the time and place to mellow one into exchanging confidences. 'Twas then that Captain Brown confessed to two hobbies, one, the pipe-organ on which, I have learned, he is an artist of merit, the other, his love for pictures, so how else could he be but likeable! To Captain Brown who is Superintendent of The British Columbia Lake and River Service, I am indebted for pointing out the location of the many scenic beauties along Kootenay Lake which I, in my feeble attempts, have tried to portray with pen and camera.

For the camera-devotee I know of no more ideal spot for a photographic outing, than on beautiful Kootenay Lake in British Columbia with its background of rugged towering mountains. It is there that I have spent my outings the past five years; yet, each succeeding year finds the subjects inexhaustible with the ever-changing clouds, and moods of the surf which at times assumes oceanic proportions. 'Tis a joy in itself to wander along the trail, breathing the fragrance of the balsams, cedars and pines, as ever and anon you glimpse the tumbling mountain-stream nearby, on its seemingly mad race to the lake a few miles below. Then one never tires as he stands on Kootenay's shores enraptured at the ever-changing waters with their background of rugged mountains partly veiled by long streamers of vapor clouds which assume fantastic formations—never the same—offering infinite possibilities to the camerist. Then come the late afternoons with their wondrous beauty as the sun sinks below the western peaks, throwing their moving shadows on the range across the lake, clothing them in a mantle of gold, purple and red, while the pink luster it sheds on clouds and sky lingers until late twilight. Yet, still added charms when the morn' breaks, a haze o'erspreads the lake with iridescent shafts of light, spreading fanlike from the breaks in the clouds to the water, beauties to which the camera can do scant justice, leaving the camerist content with the cloud-formations, discarding his filter to retain what atmospheric qualities are possible.

While the predominating joy is picture-making, we still have the evenings in which to be lulled from care with the after-supper songs, stories, and pipes glowing, intermingled with the strange, weird note of some distant coyote as we lounge around the blazing camp-fire which throws dancing shadows upon the cabin-wall, while from some nearby camp:

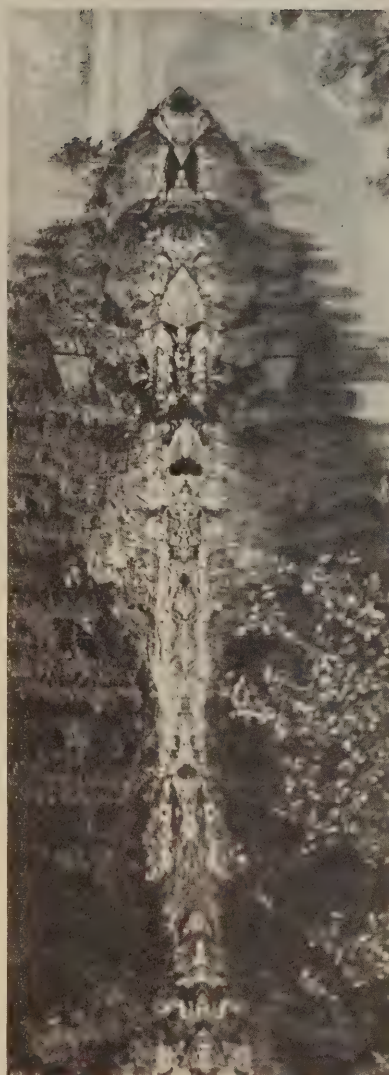
"Melting music steals upon the sky,
And softened sounds along the water die."

Joys to which campers alone are familiar, luring one's thoughts from all but the enjoyment of the moment.

Then, there are the old Indian paintings along the cliffs, each representing some past happening. One on the cliffs at Canyon Creek shows five or six goats, one caribou, while a figure of a nearby Indian points with spear to summit of mountain, undoubtedly indicating location of the animals, or else signifying the kill of some particular hunt. These paintings, in red lead, have been there since before the oldest living Indian has any knowledge. In addition, there are many remarkable freak formations of figures along the cliffs, one showing a man in a running or stepping position, having the head the shape of a bear. On this same cliff there is a clearly defined head of a Sabre-Tooth tiger, eyes perfectly spaced, mouth open, teeth in lower jaw, with one large tusk or sabre tooth in upper. This same picture if held in a vertical position—the composition is horizontal—will show one of nature's totem-poles up and down the shore-line. I have another view of this shore-line showing a great many different faces, and odd, beautiful designs, such as chalices, butterflies, etc. After viewing this shore-line vertically, turn same clear over or up side down and you will see an entirely different set of faces and designs, and in your search for the different faces you will find it as interesting as a cross-word puzzle. Totem-poles are found only among the Indian tribes of Southeastern Alaska and the North Coast of British Columbia, particularly the Hyndas, inhabiting Queen Charlotte and Prince of Wales Islands. In their villages can still be found totem-poles up to eighty feet in height, some of them hundreds of years old. Before the advent of the whites the different Indian Chiefs were known among their own people as well as among other tribes by the skill in which they excelled in hunting a particular animal. They also believed that the human intelligence transmigrated into wild animals, fish or birds. The clan of the mighty bear hunter were therefore known as bears, of a whale hunter as whales, and so on, each family of Indians representing bird, animal or fish. The grotesque figures with which the poles are covered, and which in a crude way represent whales, eagles, ravens, bears, wolves, frogs, and Indian faces, demonstrate to them the intermarriage of different families. Totem-poles were also erected in commemoration of important events of peace and war. Some totem-poles may, therefore, represent the genealogy of a particular family, and others represent an important event in the history of the tribe. All are regarded by the natives with semi-idolatry.

After I had seemingly exhausted my daylight views and despite assertions that all moonlight-pictures were faked, being taken against the sun, the following apt quotation came to me on my first attempt at a bona fide moonlight in 1921.

"While prudent wisdom stands considering, audacious ignorance hath done the deed." I, no doubt like many others, longed to picture the moonlight with its soft, elusive beauty. Uncertain of the required exposure, I first timed the moon from its appearance above the edge of a mountain, finding it traveled its own area in about four minutes and fifteen seconds, concluded it would possibly stand forty seconds without movement being too apparent. While resultant print was pleasing, on account of excessive exposure and absence of clouds the moon was somewhat harsh and too dense. However, was pleased to see the possibilities under more favorable conditions. It was not until two years later that the opportunity was again presented, and with what success will refer you to PHOTO-ERA Marine Competition, 1924, in which one of the pictures "A Moonlight Effect" received the very great honor of being awarded first prize, although unfortunately the reproduction appeared lighter than original, impairing its identity as a night-scene. From the little experience I have had with this class of subject, I find there are three or four essential factors upon which hinge the success of your final print. First your efforts will be confined to a period of three nights: the night preceding full moon, full moon, and the night following, at which time you are getting the greatest illumination. Make the exposure as soon after moonrise as possible while there is still a trace of lingering twilight; but not until the darkness is intense enough to contrast your path of light from the water. This imposes a working-limit of close to ten minutes. However, this time may be more elastic than I think, as I am basing my conclusions after inspecting similar efforts made several hours after moonrise, the moon alone being visible, balance of picture being a deep black, lacking any detail whatever. To emphasise and add perspective to the picture, the foreground plays an important part, an old picturesque tree, or branches of trees will silhouette admirably against the light-area from water in the middle ground; and last, but not least, if you are fortunate in having small clouds around the moon, you will be pleasantly surprised to see how well they register in the moon's light. Exposures on the half dozen negatives I made, varied from sixteen seconds at F/4.5 to twenty-five seconds on F/8 and forty at F/11; and, with exception of more density in the highlights on



NATURE'S TOTEM-POLE

WM. T. ADDERLEY

the longer exposures, there was no movement apparent in the clouds or moon; but I would not advise a shorter exposure than sixteen seconds, as detail is lost in dark outlines of foreground.

Time flies, Old Dear, remember am depending on you as part of my equipment on my next annual to Kootenay this coming August, so fill your holders and be in readiness. Enclosed are a few of my feeble efforts made on my last trip, that you may see the possibilities awaiting the master hand who will accompany me. To my Camera, may its bellows never sag.

BILL.



RECORD OF THE ECLIPSE

FRED L. HANSON

Practical Kinematography

HERBERT C. MCKAY

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Chapter VII—Straight Work

THE great bulk of the work of the industrial kinematographer will be "straight work". That is, basic motion-photography without elaborate effects, trickery or other juggling. Because straight work is so simple, compared with the wizardry of studio procedure, experienced kinematographers are prone to grow careless and let straight work take care of itself. This is a great mistake. Careless workmanship invariably results in low-grade film. I cannot impress too strongly upon the minds of my readers that the kinematographer of today carries a heavy responsibility. Our school-teachers mold the lives of our children to a great extent, while to a lesser degree our ministers, lecturers, and similar professional men and women perform the same service for adults; yet, there is no one class of people who exert the same influence which the kinematographer does. Whether he is but the photographer of scenes for which other artists are responsible, as in studio-work, or whether he is the sole judge of his subjects, as in the case of the news-man, he is obtaining a permanent record which will in

all probability exert a profound influence upon many individuals among the thousands which see the finished film.

Our great screen-actors and actresses long ago recognised the importance of their public; but, until recently, the hidden forces of the industry, the directors, kinematographers, editors and others were content to remain unknown. This was a mistake. Any man who in part or in whole contributes to the good, the happiness, the joy, the welfare or education of the public, should be made known to that public. The artist deserves recognition, not merely as a reward; but in order that the public may demand more of the work upon which has been set the seal of public approval.

This condition is coming. When the system is fully recognised, the mediocre kinematographer must be content to accept only humble positions. Recognition will be bestowed only for ability. This is correct. Not because ability should be rewarded for itself; but because in this, as in every profession, the most sublime attribute is service. To serve to the utmost demands ability. Hence, *you* must never admit

that you have reached the top. When any man, in any profession admits that he has mastered the sum total of knowledge connected with his profession, that man has already become a dead issue and must give way to those who are progressive and still willing to learn.

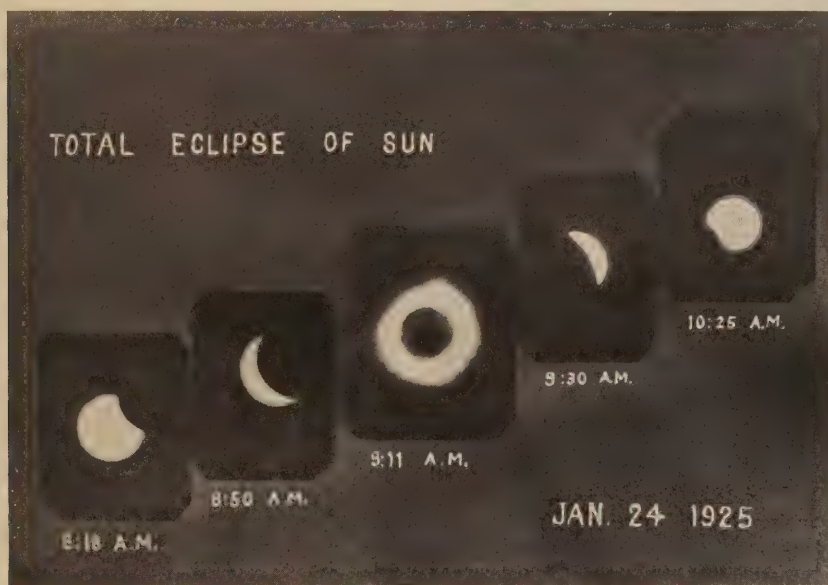
The successful kinematographer will study, experiment, and ponder; but for you and me, and all of our brother kinematographers, the most fruitful way of showing our sincerity is to pay strict attention to the most minute details of routine. Never neglect any part of your work because it is mere routine, nor ever neglect any point because it is insignificant. There is not one insignificant detail connected with the producing division of the motion-picture industry!

This painstaking care begins in the studio before you even fill your magazines. The motion-picture camera is a most delicate instrument and demands the same delicate care given to any instrument of precision. The master loves his tools and their condition reflects his attitude toward his work.

Before beginning to work, look over each item of the outfit. Examine the camera. Note any scratches which should be painted or filled at the first opportunity. See that all lenses and mounts are firm. See that the lenses are clean. Never forget that optical glass is soft and is easily scratched by many fabrics. Therefore, think before rubbing a lens with just any old

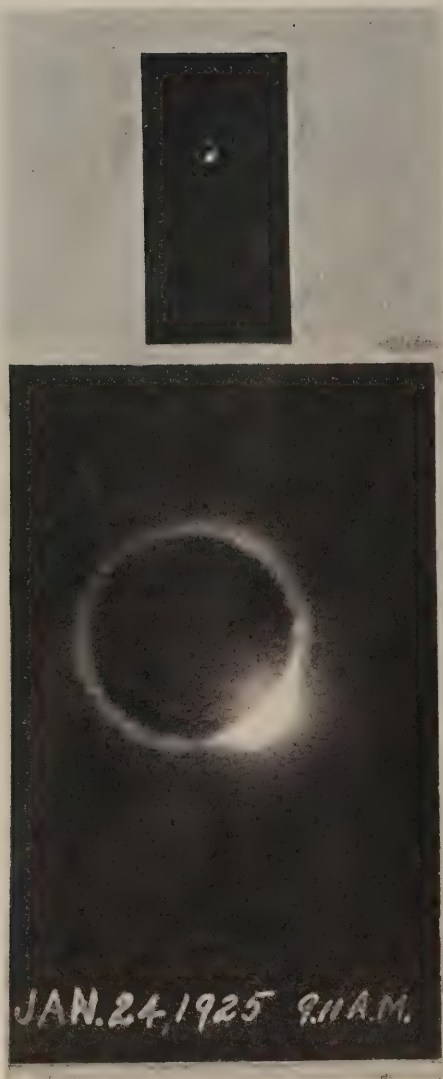
bit of cloth. Never touch a lens with wool. Open the camera. With a soft cloth wipe away all traces of old or "cut" oil and grease. Turn the crank slowly and apply a drop of fresh oil upon such bearings as need it. Be careful not to leave any oil where it could possibly get upon the film. Oil-spots on the raw stock cannot be removed after development. With a flat camel-hair brush clean out the camera. If it has a cup to catch fragments from the film-punch, empty this. Examine the rabbets of the door to see that no shreds of film remain where they might prevent the close fit of the door. Before closing the camera make sure that the interior is immaculate. This is important,

When the camera is O.K.'d, the tripod will claim your attention. Right here I wish to mention one very bad practice among many groups of professionals. It is considered "smart" and very professional to reverse the tripod and set it upon its head pending a selection of the angle of view. Now in residences, upon clean floors this might not be so bad, but in most locations the ground is covered with grit-bearing earth, sand and refuse, cement walks mar the bed plate as will marble and other stone-floors. Although not quite so delicate as the camera, a good tripod is an instrument of precision, and the gears cannot be expected to maintain their original accuracy of movement if ground away with sand and grit. Never set up the tripod except with the claws in contact with the base-



TOTAL ECLIPSE OF THE SUN

W. B. WARREN



SOLAR ENGAGEMENT RING

JOHN H. KEMP, JR.

support, as the maker intended. It is just as easy to spread the legs and set the tripod up correctly as it is to drop it upside down.

In any case dirt, sand and grit will accumulate in the grease and oil of the tripod-head, and for this reason exposed gears should be cleaned daily and concealed gears each week or two during active service. When working on beaches or near salt-water, make sure that the tripod and all exposed iron or steel parts are covered with a protective film of oil. Never remove the lens-cap from a lens on the beach until ready to shoot.

When the tripod is clean and oiled for the day's work, wipe all accessories with a soft cloth dampened with some light oil. This removes dust and grit, protects metal surfaces from rust, and keeps leather and fabric fit. Do not oil rubber-fabrics. It will make such fabric check and crack.

I have spoken repeatedly of the necessity for oiling. I hope that none of my readers will ever begin to work with a camera dripping great "gobs of goo". A watch requires plenty of oil, but plenty does not mean "excessive". A watch is carried upon all occasions. So the camera properly oiled can be carried and used by a kinematographer dressed immaculately in light clothing.

In this connection I will repeat one thing which I have both spoken and written repeatedly. The kinematographer is a gentleman. Too often he is popularly regarded as a rowdy. This is a most mistaken impression. Unfortunately studio-publicity has done much to foster this idea. Many studios very properly object to the publication of photographs which show the work in the studio. On the other hand, the public demands photographs of movies in the making. As location-sets are usually far more realistic than stage-sets, such photographs are made upon location.

It seems that dramatic action upon location demands blistering hot desert, or snow-clogged forests. It is evident that attention to work demands a certain degree of comfort, so that the kinematographer is usually shown in his shirt sleeves, collar wide and in brief in most unconventional attire, or he is bundled in mackinaw if the weather is cold. The people who see these pictures, if ever allowed upon a studio-stage, can hardly recognise the spruce, trim, well dressed kinematographer as the cameraman.

If you wear a cap, you will find it convenient to reverse it when focusing, for the peak interferes with this work; but do not make a practice of placing your cap on hind part foremost when beginning to work and wearing it so throughout the day. I will tell you frankly that if you tried this with a professional company everyone from director to lowliest extra would ridicule you. Don't swagger, don't use profanity, don't go to work unkempt. Whether you are shooting advertising-films or working with a large company, always appear the best possible under the existing circumstances. At all times act, appear and be a gentleman if you wish to win permanent success in kinematography.

(To be continued)



WASHING BROTHER'S FACE

A. L. TRACY

HONORABLE MENTION—INDOOR-GENRES

In the Land of Laughing Water at Wolfeboro

WILLIAM LUDLUM

DURING the month of August, two years ago, while summering in the Catskills, I read with considerable pleasure and a vast amount of profit, A. H. Beardsley's splendidly illustrated article on Lake Winnepesaukee, "The Smile of the Great Spirit." I made a mental resolution at the time that if the opportunity ever offered, I would take the author-artist at his word and journey to the source of the "smile." In the spring, having been requested to leave town—by my physician—for the regions of higher life in quest of permanent and substantial repairs to a bronchial tube which for some time had been performing gymnastics in the region of my breast-bone, Mr. Beardsley's article immediately came to my mind. Being very much depressed in spirit, decidedly in need of a "smile" or two to liven things up, I wrote to

him for tabulated information as to temperatures, elevations, sleeping-and-eating quarters, especially the latter, for all "brons" are subject to an abnormal need of refreshment. The resulting correspondence produced more fascinating reading material than originally incorporated in the Winnepesaukee article; and, if the succeeding issue of PHOTO-ERA MAGAZINE was delayed a week or so in publication, I do not wonder at it in the least for I am positively sure that Mr. Beardsley must have dropped all editorial and other duties to reply to my battery of questions. The information furnished was complete to the most minute detail requested; and, in conse-

EDITORIAL NOTE.—This article contains personal references to the Editor which are retained under protest and at the express desire of the author. This contribution is a well-deserved tribute to Wolfeboro. As for the Editor, he shares the feelings of the youngster above—the one having his face washed.

quence, when I arrived in Wolfeboro on the first of July, 1924, everything was in readiness for my reception.

To my amazement I found all the attractions of city-life—as we consider them—in full swing, brass-band, fireworks, up-to-date motion pictures and other forms of entertainment, in addition to the scenic beauties so glowingly set forth in Mr. Beardsley's article. In reference to the latter, I at once began to appreciate the fact that if he had erred at all it was on the side of repression rather than expression in his descriptions, for he had not told one-tenth part of the truth concerning the natural beauties of the place; although I will admit, he is some little home-town booster, the most enthusiastic I have ever met, outside of the real-estate business. In Wolfeboro, and all along the irregular one hundred and eighty-five miles of shore-line, nature has been most lavish in her handiwork with lake and land and sky, embroidering scene after scene of inexpressible charm, a veritable paradise for the photographer.

The first thing I did, after disposing of my personal baggage, was to look for Mr. Beardsley and the home of PHOTO-ERA MAGAZINE. I found the "home" delightfully situated next to the Brewster campus on the Main street. Mr. Beardsley has a decided way with him and in about thirty seconds made me feel like a member of the family. I was introduced to his father and the rest of the PHOTO-ERA "force" and we were soon chatting away in the manner of old and tried and true friends. Arrangements were perfected at once for a trip on the lake in the "Photoera", a staunch and seaworthy little craft built for comfort and good speed. The next morning found us bright and early at the landing and we soon set sail on—to me at least—the unknown sea of adventure. The lake was unusually calm and we seemed to glide along over its unrippled surface without the aid of any appreciable driving-power, so silent was the motor. In no time at all, we had passed out of Wolfeboro Bay rounding Sewall Point to meet the, then, gently rolling swell of The Broads. I am told that this long and wide sweep of the lake, under certain conditions of storm, greatly resembles the Atlantic in all its wind-lashed fury. At one time, later on, Mr. Beardsley invited me to take a little trip, as he expressed it, "to rough it, just for the experience, and to show how 'winnie' could kick up the spray when she had a mind to", but I had other very pressing and unavoidable business and was forced to decline. I explained, however, that I would gladly take his word for it, gladder than I really dared to express:

You see—I love to see the sea—
When on the shore I stand;
But never care to see the sea—
When very far from land,

especially when the local barometer seems inclined to exhibit a low-down disposition. I just waive the waves and sing "Pull for the shore."

To resume; we sped on for many miles, down The Broads to innumerable clusters of green-draped islands, some large, some small, winding in and out through scarcely perceptible channels and then followed the irregular shore-line of wooded point and sanded cove, dotted here and there with summer-camps and private bungalows. We returned to port as we came, over a sea of silver and beneath a cloudless sky of the most heavenly blue I have ever seen. This was but the beginning of many more wonderful days on the lake, including a trip on the famous steamer "Mount Washington", and others in the little craft of my first adventure.

Of Wolfeboro, itself, a great many good things may be said. It is a typical New England village, houses mostly painted white with the usual green blinds, and all apparently just fresh from the painter's hands. I do not recollect one house unpainted or out of repair. It is one of the neatest and cleanest little towns I have ever visited, and it contains all the attractions which city-bred folks seem to think so very necessary to personal comfort, churches, Casino, motion-picture theater, innumerable stores and good ones, and every variety of summer-sport, golf, tennis, swimming, boating and camping; and, best of all, Wolfeboro folks are *real* folks, the real heart-warming, friendly kind that cannot do too much to make your stay a pleasant one.

I spent many happy hours wandering along the shore-line with notebook and camera, played golf on the links, went to the movies and lived the life of true contentment to the limit; and, when necessity ordered me to move on, I left with sincere regret. The only thing about which I had no regret was my bronchial trouble which left me within twenty-four hours after my arrival and I have not had a demonstration of chest-gymnastics since. In its place I carry a permanent "smile", and why shouldn't I? "The Smile of the Great Spirit" made a very personal and wonderful application.

This is not an advertisement for any particular house or hotel, but I do wish to state that the "entertainment" provided by Mrs. H. H. Meader at Crescent Lake Cottage, helped very materially to add to my comfort and pleasure, as did also the friendly efforts of Mr. Landman, superintendent of schools, and his excellent wife. And,

of course, as the real object of my pilgrimage was to meet Mr. Beardsley, it is right and proper that I should "expose" him a little, too. I have corresponded with Mr. Beardsley for a number of years and his letters have always been of great moment to me, overflowing with kindly advice and good-fellowship, and then, he has said some very nice things about me in his magazine. I wanted to meet the man and I did, and, well—all you photo-fellows who are privileged to receive some of Mr. Beardsley's letters and appreciate what they are, had better get busy, go to Wolfeboro and see for yourselves.

My last night at Wolfeboro I shall never forget. We sat on the Casino porch overhanging the shore and watched the twinkling path on the lake widen and spread as the silver-moon rose apparently out of the water, casting its wonderful spell of mystery on all about. Inside the music of the dance-orchestra was softly keeping rhythm to the lapping of the incoming waves and the combined melody seemed to be repeating over and over—"Come again, come again!" and, you bet, I will!

Though my vacation days are done—
 When'er I see the setting sun
 Across the background of the blue
 Fling darting beams of varying hue,
 I see through clouds of amethyst,
 Through luring lanes of golden mist,
 I see through every form they take—
 The smiling silver of the lake.

A beckoning smile it seems to me,
 A smile from spirit land set free,
 A smile to warm the heart of care
 Erasing every shadow there
 And, as it beams on me, I feel
 The motor's throb, the speeding keel,
 I hear the spatter of the spray
 And—off to Smile Land I'm away.

I close my eyes, the better to
 Shut out the disconcerting view
 Of bricks and stones in houses near
 And shout, "Away! Go! Disappear!
 "I'll see you not! but here, instead—
 "I'll view the pictures in my head!"
 And then, the Lord be thanked 'tis so,
 The "smile" flows in and—off they go.

Behind the curtain of my lids
 The visions troop as fancy bids.
 Again I see the mountains vast,
 The clouds above the forests massed,
 The curling waves, the shining shore,
 All this I see, yet something more;
 I see the "smile,"—Great Spirit be
 Forever near—to smile on me.

In conclusion, there can be no place better adapted to the whims and fancies of the many members of picture-hunting fraternity than Wolfeboro. The town itself and its immediate surroundings offer a multitude of beautiful views of almost endless variety, and all other points of interest may be reached very easily either by land or water.



WOLFEBORO BAY

HERBERT B. TURNER



Courtesy of Foto-Revista

TIERRA DEL FUEGO
DE LA SOCIEDAD ARGENTINA DE AFICIONADOS





EDITORIAL



The Slanting Waterline

IN an endeavor to help improve the work of the serious photographer, the writer of this page has labored incessantly and conscientiously for nearly twenty years. To say that success has attended his efforts, may sound a bit boastful; but candor moves him to say that it is true nevertheless. Many a feature that once marred a pictorial composition or lucky snapshot—admirable, otherwise—has been pointed out; and, recognised by the worker as detrimental to the pictorial quality of his prints, was carefully avoided thereafter.

While engaged in the task of reviewing the photographic prints that have been brought to his attention, the writer has noticed one serious technical fault that is being committed with astonishing frequency, and that is the waterline of a sheet of water when it deviates from the normal. The industrial or commercial photographer, when called upon to photograph an architectural subject that includes a view of near or distant water, rests his camera on a tripod—as, indeed, he does in all his direct work. Having adjusted his camera so that it is perfectly level and plumb, and having examined the photographic image on the groundglass, he feels sure that all vertical and horizontal lines will be rendered accurately. Consequently, such a defect as a falsely represented waterline—unless it be a shore or a river scene in perspective, is rarely, if ever, met in really first-class professional work. The photo-pictorialist, however—who usually employs a hand-camera—is so absorbed in the scenic beauty of his subject, that he often neglects to give any thought to the waterline of the sheet of water that may feature his picture. Of course, it requires some care, if not dexterity, to manage a hand-camera so that it may register the view as desired. The eye of the camerist passes, alternately, from the subject to the image in the view-finder—often several times—and, in his effort to include just what he wants, the enthusiastic amateur may neglect to hold the camera absolutely level. In photographing buildings, street-scenes and the like, the camerist is disposed to exercise more care, although it sometimes happens that the least carelessness in an effort to hold the camera plumb is visible in the result; and even skilful trimming of the print may not avail to restore

the lost perpendicularity—unless, indeed, the worker is willing to sacrifice a goodly portion of his picture and thereby mar the intended pictorial effect. Similarly, the author of a well-composed landscape featured by a sheet of water, or of a marine, is not willing to spoil the composition of a picture he took so much trouble to obtain.

This, probably, is the reason that photographs with a faultily rendered waterline are so numerous; and yet the composition of many of them might not have suffered, had the trimming been extended to the four sides of the print. Often, too, the worker is entirely unconscious of the above-mentioned defect in his picture; and great is his astonishment when the matter is brought to his attention. On the other hand, it is difficult to believe that a worker, particularly one who assumes to be an authority in the art of picture-making, will knowingly send out prints in which the distant shoreline of a lake or a river—normally level in the original view—is distorted.

The examination, by the PHOTO-ERA jury, of three hundred and odd prints entered in the February (Miscellaneous) competition for advanced workers, revealed the presence of an unusually large number of marines, and landscapes containing water-areas. In very many of these entries the waterline—normally level—was seen to be more or less oblique!

It is possible that, in the future, the jury may ignore such technically deficient prints, regardless of any outstanding merit they may possess. The topic for the August competition is "Real Sunrise and Sunset Pictures". It is hoped that every participant will make certain, first, whether the waterline in the scene about to be photographed is level or slanting, and, second, that it is truthfully rendered. Of course, it is assumed that the camerist is blessed with normal vision.



WE venture to ask if it is not true that a series of photographs—issued by the Camera Club, New York, and published in a widely read local newspaper—of much-abused and sadly neglected Central Park produces a more powerful effect upon the public mind, than all the criticism of the New York press?



ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$3.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs and to responsible organisations for exhibition-purposes, *free of cost*.

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data. Criticism at request.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelve-month become ineligible to compete for prizes in this competition for two years thereafter.

Awards—Advanced Competition

Subject—Indoor Genres

Closed March 31, 1925

First Prize: J. Vildensky.

Second Prize: Duance P. Hotchkiss.

Third Prize: Eleanor F. Jones.

Honorable Mention: Herbert J. Harper; Michael J. Pecora; Inez Bentley Kelso; A. L. Tracy; Stanley Shiner; Kenneth D. Smith.



Subjects for Competition—1925

"My Home." Closes January 31.

"Miscellaneous." Closes February 28.

"Indoor-Genres." Closes March 31.

"Table-Top Photography." Closes April 30.

"Artificial Light Photographs." Closes May 31.

"Miscellaneous." Closes June 30.

"Front-Cover Illustrations." Closes July 31.

"Real Sunrise and Sunset Pictures." August 31.

"Wild and Cultivated Trees." Closes September 30.

"Miscellaneous." Closes October 31.

"Lakes, Rivers and Brooks." Closes November 30.

"Interesting People and Places." Closes Dec. 31.

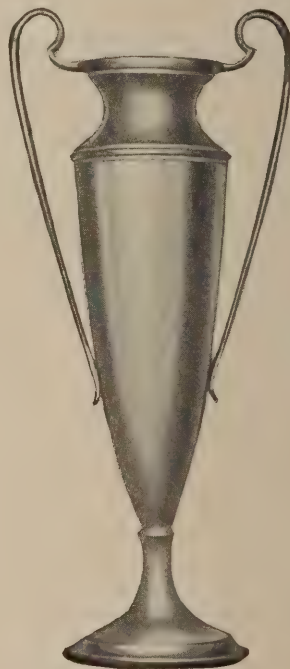


Photo-Era Prize-Cup



THE CAMP CHOPIN
J. VILDENSKY
FIRST PRIZE—INDOOR-GENRES



MORNING-SERVICE

DUANE P. HOTCHKISS

SECOND PRIZE—INDOOR-GENRES

Advanced Competition

In the earlier days in photography, the making of an indoor photograph including human models, was a matter of much preparation to imitate the effects of professional portrait-galleries. The light must fall at such an angle and the shadows must be almost as light as the higher lights. The background must of course be an artificial one; and so on. Lenses were slow, and so were the plates, and long exposures were necessary and expected. Today, the amateur, with his tiny camera, resting upon table, chair or other convenient object; his ultra-rapid lens wide open, frequently now at F 4.5, arranges his model, or models, in a few minutes, with light pouring in through windows and doors and in a second or two, records upon the super-sensitive plate or film of the present, his desired picture. It is often done in a matter of ten minutes from start to finish. "The Camp Chopin" page 343, is apparently one of that kind. We can imagine the camper-model, coming in from the outdoor world and stopping for a moment to try some musical piece, which attracts his fancy. Some amateur camerist, keen of perception, always on the lookout for a picture, scents one in the making, and with little kodak quickly placed, soon captures the coveted negative. In this

instance how well done! Three or four simple tones, and the highlights telling the story. The face dominates with its clear fine profile. The hands are especially natural and don't appear posed at all. The only inharmonious note is the candle. It should be considerably subdued.

Data: Eastman Kodak, Eastman roll film; exposure, 2 seconds at 2 P.M., indoors at F/8, in July; California sunshine outside; Pyro tank; enlarged on Artura Carbon Black E. Smooth.

The sweet-faced girls in "Morning Service", on this page, form a beautiful and satisfying group. The artist is to be congratulated on the happy result. The portion of curving arch at right, gives, with the light doorway, just the relief necessary to the background. The light material in the surplises is soft and free of all harshness.

Data: March, 2.30 P.M.; bright diffused daylight; exposure 4 seconds with 7-inch Verito lens F/6, using rear combination of 11 inches focus; Eastman Super Speed film, 5 x 7; Pyro-Elon in tank.

"Clinching the Diagnosis", page 345, by reason of its novelty and good technical quality claims our attention. To be sure, the table's edge is insistent, but we quickly leave that and go to the face and microscope. Here we find evidence of the genuineness of the pose and



CLINCHING THE DIAGNOSIS

ELEANOR F. JONES

THIRD PRIZE—INDOOR-GENRES

expression. No "faking" here. The open book and case, the bottles and other necessary articles, unobtrusively but well placed, complete the story. We feel the atmosphere of hospital and laboratory in the severe, blank wall. Altogether a very good result.

Data: made in doctor's laboratory with Eastman 8 x 10 camera, fitted with Series II F/4.5 Velostigmat. Exposure approximately 1 second at F/6.3.

"Simon Says Thumbs Up!", page 346, is full of the spirit of childhood. Although Simon says, "Thumbs Up," one of the little misses has thumbs down. Was it not always so in actual life? We note with a feeling of gladness, the sunshine pouring directly in, giving the happy, childhood idea. In this period of life all is, and should be, sunshine and highlights; no deep shades. These will come soon enough, later on. Data: March; about 11 A.M., bright sun; Eastman No. 1A Auto-graphic Kodak Jr. with F/7.7; Anastigmat lens; exposure one second at F/11. Developed in Pyro; prints by projection on Defender Velour Black double-weight buff silk. Elon-Hydro.

E. H. WASHBURN.

In Dear Old England

GUIDE (to camerist), "Look at that half-ruined castle! It might be at least eight hundred years old. Believe me, Sir, they don't build such ancient castles nowadays!"—*Bugle*.

ANSWERS TO QUERIES

Subscribers and regular readers wishing information upon any point in connection with their photographic work are invited to make use of this department. If a personal reply is desired, enclose a self-addressed, stamped envelope.

O. C. M.—Horizontal scratches on roll-film negatives are sometimes caused by trying to twist the paper more tightly around the spool after removing it from the camera. If, in addition, small particles of emulsion become loosened during the operation of twisting, they are apt to tear long, deep gashes in the celluloid base of the film. Such abrasions cannot be removed satisfactorily by retouching. Whenever possible, use a roll-film camera that is equipped with some form of tension spool-holder. This device prevents the film from unrolling faster than the winding-key is turned. In any event, it is far better to wrap up a loosely wound roll in heavy manila paper than to try to twist the black paper more tightly around the film. Attention to this matter is of the greatest importance.

R. A.—Inaccurate shutter-speeds, due to dust in pneumatic valve, may be corrected by



"SIMON SAYS THUMBS UP!" INEZ B. KELSO
HONORABLE MENTION—INDOOR-GENRES

having the cylinders re-buffed. This work should be entrusted only to an expert. In no circumstances should oil or grease be used. Any firm of acknowledged reliability can attend to the cleaning of your shutter, and will guarantee entire satisfaction.

J. O.—Whether tank or tray-developing is the best depends, for a decision, on individual taste and requirements. One camerist may find tank-developing both efficient and convenient, and another may find greater pleasure and profit in darkroom-developing. However, the fact remains that tank-developing of plates and films is no longer considered to be experimental. Amateur and professional photographers have put the stamp of their approval on tank-developing. Autochrome and Paget plates are still developed by hand in the darkroom. The developing of these plates—or any plates and films used to obtain scientific data—requires constant attention during the entire developing-process, and they cannot be developed successfully in a tank, for the reason stated. For the average amateur, who is not interested particularly in the chemistry of photography, the tank is unquestionably the most convenient and efficient method to develop action and snapshot-pictures.

H. C. K.—For snapshot-work in city-streets on bright days the shutter should be set at $\frac{1}{50}$ of a second, the stop at F/16 and the focusing-indicator at twenty-five feet. This combination of shutter-speed,

stop and focus will meet all ordinary requirements of the camerist equipped with a hand-camera. Virtually, any hand-camera—thus set—becomes equivalent to a fixed-focus box-form camera, and is eminently suited to genre-photography in city-streets.

W. J. R.—Films may be used after expiration-date, but successful results cannot be guaranteed. However, if the film has been kept in a cool, dry place, and it is not too long after the expiration-date, you should obtain fairly satisfactory results. Do not use such a film to photograph any subject which cannot be duplicated readily. Such a film is an ideal one with which to experiment, and its use for this purpose is preferable to any serious work.

S. B. A.—The advantage of a reflecting-camera lies in the fact that the image of the subject appears on the ground-glass right-side up until the shutter is released. No focusing-cloth or tripod is required to compose each picture properly and to the best advantage. There are many excellent reflecting-cameras now on the market. Some foreign instruments fold into small compass and may be carried as easily as a small hand-camera. Most reflecting-cameras are equipped with focal-plane shutters and are used extensively to make speed-pictures. However, these cameras are equally well-adapted to all forms of amateur and professional photography and will serve to meet the requirements of the pictorialist.



SUBJECT FOR NEXT COMPETITION
ADVANCED WORKERS



HAVING A RIDE

DR. T. W. KILMER

**Advanced Competition—Front-Cover
Illustrations**

Closes July 31, 1925

THIS is virtually a new subject for our readers. Although a number of years ago a similar competition was conducted, there has been none for several years. The purpose is to arouse interest in suitable subjects for front-cover illustrations for this, as well as other magazines. In fact, it is a branch of photography which our readers can capitalise to their advantage. Good prices are paid for acceptable photographs or photographic designs for front covers. As one method to make one's camera pay, it is excellent. Hence, it

seemed a subject well worth including in our list for 1925 and should merit the attention of our readers.

Probably the first question to be asked is what manner of subject should be selected for this competition. Instead of answering this question in detail, let me suggest that the reader think out the problem for himself. By that I mean, let him make up his mind what constitutes a good front-cover illustration. What is it that would attract his attention and appeal to him? Perhaps it might be a smiling baby, a beautiful landscape, a striking marine or a splendid portrait. Whatever his decision may be, let him enter such a picture and gain much pleasant and helpful photographic experience thereby.

A. H. BEARDSLEY



BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.00.

Honorable Mention: (a) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the Publisher.

(b) Those who win an Honorable Mention Award and are *already subscribers* will receive a credit of \$1.00 toward the purchase of any standard photographic textbook. This credit to be used within thirty days of receipt in the U.S.A., and within ninety days overseas.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of limited experience with practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request. Criticism at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

Awards—Beginners' Competition

Subject—Miscellaneous

Closed March 31, 1925

First Prize: Henry Sill.

Second Prize: Sukezo Takayoshi.

Honorable Mention: Paul L. Miller; Irving Singer; Burton Slade, Jr.

What Can a Beginner Do?

MANY times the question arises as to what a beginner can do to make photographic progress. He has a moderate-priced camera and, perhaps, a developing and printing outfit. He has made the usual preliminary snapshots of relatives, friends and family pets. He has seen some exhibition-pictures or been deeply impressed by some excellent pictures in the *National Geographic Magazine*. How can he span the great gulf which seems to lie between himself and the kind of photographic work he is eager to do? This is the problem of many beginners who soon realise that there is nothing to be gained by ordinary snapshooting.

No doubt the first step is to make the acquaintance of a professional or amateur photographer who will take an active interest in helping to work out the problem. It will require patience and a friendly understanding between the beginner and the experienced worker. The matter of criticism should be watched carefully that it does not turn to ridicule or even unkindness. Many a promising beginner has been permanently driven out of photography by the unintentional, but nevertheless caustic comment of an experienced worker. Therefore, assuming that some arrangement, which is mutually satisfactory, has been brought about, let the beginner try earnestly to make the most of his opportunity. If the arrangement is what it should be, it will not require many weeks for the beginner to make good progress and soon be able to work along his own original lines.

However, let us suppose that no professional or experienced amateur is available. What then? In that event it becomes a case of working out one's own photographic salvation. This is by no means a great task, provided the matter is approached intelligently. Although some appear to have the idea that a good photographic magazine is not essential, let me insist that it is. Not because I happen to be an editor of one but because in many cases I know that a photographic magazine has pointed the way to pictorial success. However, just buying a copy or subscribing will not bring about the desired results. Only by the careful reading of the text and also the advertisements can the beginner gain in artistic and technical knowledge. Of great benefit to him will be the competitions. To be sure, he may send in many prints and have them promptly returned; but if he asks for criticism and accepts it good naturedly and tries to see the faults for himself, he will be rewarded by an Honorable Mention or even a prize. It is not easy to have one's best effort criticised and considered of no pictorial value. It requires courage to make the next



THE ARCH

HENRY SILL

FIRST PRIZE—BEGINNERS' COMPETITION

attempt; but let me assure my readers that only by meeting the issue squarely is this or any problem solved. I might add that I know just what I am talking about from personal experience.

After getting into line by means of a good photographic magazine the next step should be in the direction of building up a photographic library. By purchasing one book at a time and making sure beforehand that it is the best book obtainable on the subject, the expense need not be excessive. The photographic textbook supplements the magazine and enables the beginner to study at greater length and with more detail the particular process or the artistic technique of photography. Were it possible to combine the assistance of a professional or advanced amateur with supplementary reading in the photographic magazine and textbooks the beginner could not be in a better position to advance toward photographic success.

The value of membership in a good camera club should not be underestimated nor should photographic courses in various educational institutions and photographic schools be overlooked. Just how many of these opportunities the beginner can accept will depend upon the available time and money. There is no reason that he should not make the most of some of

the avenues which will lead him to a permanent position in the ranks of the pictorialists or advanced amateurs.

My point in this little editorial is to assure the beginner that there is much that he can do to forge ahead in photography. Wherever he may be, there are opportunities if he will make the most of them and show the required initiative. Some of the leading pictorialists of the day began their work in little towns far removed from camera clubs or photographic courses. Through the magazines and photographic textbooks they studied, and, as a result of their sending pictures to competitions, they learned what it means to win the titles of pictorialist or amateur photographer. It should not be forgotten that many of the salon exhibitors of today were the beginners of yesterday. They did not achieve their present honors without traveling the difficult road of personal effort and study. However, the task is a pleasant one and the rewards are great. The things that men achieve easily are never valued so highly as those which require hard work and courage. Therefore, there is much that the beginner can do and with the summer now before him let him take the steps which will surely bring their reward in the months to come.

A. H. BEARDSLEY.



THROUGH THE TUNNEL SUKEZO TAKAJOSHI
SECOND PRIZE—BEGINNERS' COMPETITION

Beginners' Competition

The beginners frequently "come fast." More and more often one of them will produce a result which shows appreciation of all the good points in successful picture-making.

"The Arch", page 349, indicates a very considerable knowledge of tone-value and space arrangement. It is a "pattern-picture" and while not one to inspire pleasurable thoughts, being of such sordid material, yet the lighted tracery of the bridge-arch and the other highlights picked out of the middle tone are rather interesting. Good technique is evident throughout.

Data: October, 9.30 P.M. by light of street-lamp; Victory Reflex camera $2\frac{1}{4} \times 3\frac{3}{4}$, Cook lens, 5 inch focus; exposed 15 minutes at F/4.5 on Agfa Film Pack; A.B.C. Pyro-Metol developed; enlarged on Gevaert Ortho Bromide Rough.

"Through the Tunnel," on this page, is a sort of "bull's-eye" effect picture, but the scene framed in the arch is full of atmosphere and perspective. In fact the whole is a good example of both linear and aerial perspective. What appears to be a human habitation in the distance gives play to the imagination. The original print being of sepia tone has less contrast. Data: View-camera, 5 x 7; three-focus lens, Eastman plate; July 2.30 P.M.

E. H. WASHBURN.

Don't Forget Your Camera

It might appear that the reader of these lines would not be so likely to forget to take along his camera as the man who did not see this magazine. Yet, strange as it may seem, there have been instances where a beginner, who accepted an invitation to spend the week-end out of town, actually forgot to take his camera. In one case, twelve rolls of film were bought and carefully placed in a bag—but the camera was left behind. If the beginner really wishes to make photographic progress, he should not overlook a single opportunity to use his camera. Trips to interesting places and with congenial friends should be recorded permanently. What is more, these pictures should be carefully timed, correctly focused and properly printed. To be able to make worthwhile records of vacation-days necessitates practice and attention to photographic fundamentals. Only by taking along the camera on every trip, no matter how short, can the requisite skill and confidence be obtained.

During the coming summer every beginner should resolve mentally not to waste his time, films and paper by careless workmanship or hurried snapshots. It is not a difficult problem to take a few extra moments to select the subject or arrange a group attractively instead of hurrying and making errors in exposure, focusing and composition.



OUR CONTRIBUTING CRITICS



WANTED—A FRIEND

SALOME E. MARCKWARDT

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

THE scene is rather pleasing, the pose of the two little girls, if they be girls, is not devoid of simple naturalness inviting tender sympathetic feelings. The composition, placing of the two subjects slightly below and to one side of the center is well chosen.

The scene might have been more pleasing, yet, had the subject nearest the camera turned her head a little, looking away from the camera, and the bare-legged girl might have shown the tip of her nose and a bit of her cheek, looking in the same general direction.

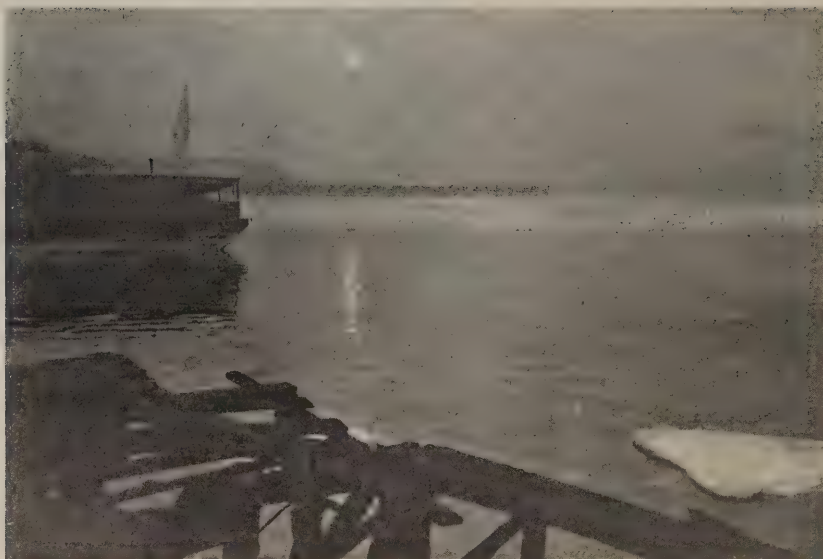
A slightly lower key of tone would subdue the chalklike whiteness of her bare legs, rendering the face of her sister less pale.

The background is rather prominent, the window and shutter more so than the door-frame. This might have been avoided by having focused the subjects more sharply thus blurring the background.

It might yet be improved by trimming the top in line with the bottom of the window, but this criticism does not approve of trimming as a means of bettering one's ability as a photographer.

L. HELBAK.

"As I am a man, everything human interests me." So spoke Terence, the Roman poet. This might explain the universal appeal which "Wanted—A Friend" might have if properly treated. The photographer aimed high; he sought to catch a bit of life in one of its bitterest moments. I do not believe that this picture was posed. Behold the appealing look of the child on the right. As a tender expression of sorrow, it is rarely excelled in real life. The photographer evidently happened upon the scene immediately after an infantile "set-to" had transpired and



TWILIGHT ON THE HUDSON

IRVING SINGER

YOUR CRITICISM IS INVITED

took little time for ceremony for fear of losing a precious record.

Perhaps the most regrettable feature is the fact that the face of the farthest child is hidden from view. If only we could behold the expression of sorrow on her face! Doubtless, she also bears the tearful visage of a friendless child.

If this portrait were made with the camera pointing squarely at the subjects and, perhaps, a little closer, the print would be sentimentally and artistically improved to a great extent. The uninteresting and distracting background would be partially eliminated and the face of the child on the left would be visible. A balanced portrait would result; and, as a study in expression, it would be a work of art.

ARTHUR L. MARBLE.

LOOKING at the picture "Wanted—A Friend", by Salome E. Marckwardt, the background and surroundings are agreeable; but, unfortunately, the author was too carefree about most important point. Every picture must have some interesting point in unit; but what will we find from this print? It seems to me that the two lassies in the center have different ideas. They are looking in different directions or they are interesting from different subjects. I do not know what the author was expecting to suggest; but we feel something uneasy and unpleasant. I wonder if the author snapped the children with no idea, but moved by curiosity. If it is the case, it may be a good record, but have no pictorial value. When the author's conception is not correct, there is no way to save the picture. I will say nothing more, but wish to advise to the author: Think and think before using the photographic outfit.

Dr. K. KOIKE.

ONE would say that Miss (?) Marckwardt first took her picture and then gave it a title and not a very suitable one.

Beyond the children looking bored at having to sit

still while the exposure is being made they seem quite bonny and happy. The plump limbs and face and the gloss on the hair would suggest that there were those who loved the little girls very much.

I would trim off the window to center the interest more on the kiddies. Had both been looking at the same object it would have pulled the picture together more and a lighting a little to the side would have given more relief.

With two such charming models Miss Marckwardt should get some beautiful pictures. Just let them play—watch your chance and "snap" when they are not looking.

ROSELLA M. WELLER.

THIS is primarily a "human interest" photo; pictorially it is very poor work. However, although the background could be better chosen, it serves very well to illustrate the title. The curly-haired little girl at the left should have been coaxed to look our way a trifle so her face would make that mass of hair topping her shoulders interesting. Since both subjects are evidently posing for the picture, they might as well have been posed more gracefully. The picture would show more "life" if the girl at the left were standing, looking out of the picture towards the right, with her face in profile.

JOSEPH G. HOTTINGER.



Not a Select Term

FIRST snapshotter: "Say Al! What do they call the bunch that pick the best pictures for a salon-show?"

SECOND snapshotter: "The Picking-Committee, I guess."

FIRST snapshotter: "Why not The Pickers, for short?"

This might be a good subject for Millet to have painted as a companion to his Gleaners.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



"From a Pittsburgh Office Window", cover and frontispiece, is a fine example of what an expert, such as Mr. Archer, can do with a subject which the unskilled and less observant camerist would look upon without the slightest idea of using it for pictorial purposes. Mr. Archer, by choosing a propitious atmospheric condition and proper direction of light, has succeeded in making a very pleasing picture. The dark tower at left first catches the eye, being the largest dark object; thence progress is made along the shaded edges of lower buildings, until we arrive at the church-spire, which, with its shadow against the lighter-toned middle and extreme distance, serves to push them back, as it were, giving a sense of planes and distance. The spire also cuts through and breaks up the two horizontal lines which cross the pictures, rendering them less marked, and forms a punctuation-point for the whole of the lighter and middle tones. It also balances the large tower. The extreme high light of the building near center of picture carries us out again to that point, whence we float off (figuratively speaking), over the tree-tops and river, unto the unknown region beyond. By using soft focus, the artist overcomes the hard-and-fast structural lines of near-by buildings and concentrates the interest on the perspective. Very cleverly done. No data.

"Shadows on the Wall", page 310, excels in the handling of light and middle tones. The arrangement of lines is good, although the diagonal line of shadow crossing lower center of the picture is difficult to get away from. The tree-trunk and steps balance it, however. Would not the picture gain strength and solidity by a slightly darkened foreground shadow? It appears a bit indefinite and unstable for an architectural subject. No data.

"The Mirage", page 311. How those Pittsburghers do manage to idealise their materialistic subjects! The bridge, with piers reflected in the river, and the snow-bound bank just frame in those ghost-like works across on the opposite side. The shore line, over there, is a bit too straight and unbroken. It comes dangerously near cutting the picture into equal parts. No data.

"Pastorale", page 313. Looking at this immediately after the diffused-focus print on preceding page, one receives an impression of extreme sharpness of definition. The large tree is a beautiful decorative mass and well supported by the group of two at left. The grouping of sheep is very fortunate indeed, as will be appreciated by anyone who has waited patiently, by the hour, for such groups to form. Some days they don't happen at all. The horses, too, lend interest and the figure is well placed. The horizon line, so straight, appears to be the end of everything and the blank sky at that point gives no hint of what may be out there. No data.

"The 15th Hole", page 314, is a good example of tone and spotting. Otherwise not particularly of interest, excepting to golfers. No data.

"Hindoo Princess", page 315. A fine portrait composition, rich in dark tones. The pose is well arranged and the expression is just that mysterious "something" which we associate with this race. Toning down a few of the overbright spots in the drapery

would add to the value of the high lights on the pendant and in the eyes. No data.

The silhouetted rocks in "A Glow in the West", page 317, give brilliancy to the rest of this picture. Probably Mr. Davis waited for quite a time to get such a combination, or, if not, he was very quick to see and record it. Data: October, 5.15 p.m., hazy atmosphere. Exposure 1/5 second at F/8, on Instantaneous Iso. Plate.

Somehow, "The Lightship", page 318, gives an impression of moonlight, the impenetrable mass at the horizon being so dark. Why not make it one by working in some lights on the vessel's mastheads and darkening upper sky? Data: made from passing steamer at 6 p.m. (standard time) in August; exposure 1/100 second, stop F/8, Ilex anastigmat; Cramer Inst. Iso. Plate. Sunlight diffused by bank of haze.

"As Evening Approaches", page 319, well illustrates the text of Mr. Davis's instructive article. The low horizon and sky-line emphasise the beautiful clouded sky. The middle distance appears to suffer from too little exposure, as the details are rather lacking, even for that time of day in October. The shadows, therefore are, in this print, inclined to be muddy, and come near to cutting the picture in two. We wonder if a trifle less printing of that part would not give a more pleasing result. Data: Early October sunset, 5 p.m. Sun obscured by a thin cloud. Exposure 1/25 second, stop F/11; Pocket Camera fitted with R. R. lens. Ansco Speedex film. The illustration is from a section of the negative and does not show immediate foreground.

"The Gathering Storm", page 320, suffers from the same defect as the print on page 319, excepting that the sky-line, showing as it does an undulating line, gives greater variety and makes it more interesting. Here the shadow is so devoid of substance as to make it almost a silhouette. It is difficult to understand the two light lines running from the bottom of the print to the light area in the middle of the dark mass. Evidently this is sand or gravel; it matters not, however. The sky portion is excellent, and advancing clouds have a menacing look. There is a strong feeling of movement from left to right, due to the shape of the clouds. The ragged one in the upper left seems to be the advance guard of darker and more ominous cohorts yet to come. Data: About the middle of October at 4.45 p.m., with sun obscured by clouds. Exposure, 1/25 second, stop F/6.3, on Inst. Iso. Plate. Mr. Davis says, "A relatively short exposure had to be made to get this subject, as a strong wind was blowing at the time, and in order to obtain the height of viewpoint required, the camera had to be held in the hand, while the photographer stood up in motor-car".

The development of air-plane photography since the Great War has been very rapid, and what would have been impossible, or difficult, then, is a matter of everyday work at present. In all sorts of publications we are shown reproductions of photographs taken from the air, and it has long ceased to be a novelty to see bird's-eye views of large commercial plants covering great acreage, and of cities and towns, which have for some cause become "news". The story of the U. S. Army Air Service Technical School, Photographic Depart-

ment, which is told so interestingly on pages 322 to 327, bears testimony to what our Government is doing along this line. The photographs illustrating it should be of great interest to all readers, both on account of their interest as illustrations and their faultless technical merits. They are models of both, and if perchance they should inspire some young men to enlist in this service, they will have performed a mission.

It is not easy to decide which of the series is most interesting. The three on pages 322, 323 and 324 give us a good idea of the steps in preparing and making photographic mosaics, as the pieced-together photographs are called. The natural poses and unconsciousness of the men make them doubly interesting. In fact this is true of the entire series.

On page 325, numbers 1, 2 and 3 give us an idea of the modern apparatus used to handle large-size roll-film in quantity; a process few are privileged to see, while the remaining three on this page and the six on page 326 show how laboratory and dark-room work is performed by many working at one time. These should be of help to newly formed camera clubs, to show them how to equip for the convenience of members. We are impressed with the completeness of everything, and also reminded of the large size of Uncle Sam's purse, which allows such expense to be incurred. Fortunate the young man who is able to enlist in such absorbing and interesting service.

"The Great Outdoors", page 328, the first of three pictures illustrating Mr. Adderley's engaging story, is well named and technically a perfect record. The man on the beach appears to be drinking in sunshine and fresh air. The dog, too, seems well satisfied to be along with his master. Data: August, 11.30 A.M.; bright sun; Ilex Paragon lens, $8\frac{1}{2}$ inch focus, at F/11; $\frac{1}{2}$ -second exposure, 15 times filter; on 4 x 5 Ortho-Non-halation plate; Korona View camera, 4 x 5. Eastman Portrait Bromide paper, amidol developer.

"Veiled Mountain", page 329, is a pleasing subject and well named. The tree and rocks in the foreground are the features which make this a success. Without them the fine sense of atmosphere and distance would be lost and an insipid print the result. By a peculiar chance the mountain's white "veil" resembles a gigantic saurian, or the ghost of one, floating in space, eyes closed, as if in a dream. Data: August, 9 A.M.; partly cloudy; F/8; $\frac{1}{25}$ second; no filter. All other data as in preceding.

"A Moonlight Effect", page 331, is in fact a real moonlight picture, as the data shows. This is the real "picture" of the series and shows Mr. Adderley appreciates pictorial arrangement and has the skill necessary to record what pleases him. The tree silhouettes are placed with a purpose to decorate the picture and the moon and its path are in just the right place. Data: August 8.05 P.M., moonlight; F/5.6, $\frac{1}{24}$ seconds, no filter. All other data same as preceding.

We marvel at "Nature's Totem Pole", page 333, with its grotesque faces. Upon closer study it is discovered that the maker has cleverly "up-ended" one of his lake-shore bits. As somebody has said; "Ain't nature wonderful?" Data: August, 11 A.M., partly cloudy; exposure $\frac{1}{2}$ second, 8-times filter; P. M. C. No. 9 contrast Bromide paper, print. Same camera, lens, plate, etc., as others in the series.

Total Eclipse photographs keep coming in from all sides. The "Record", by Mr. Hanson, page 334, is made more realistic by the inclusion of the church and tree-tops. Data: First exposure 8.05 A.M. and about 10 minutes elapsed between each two of the following. Exposures $\frac{1}{100}$ second at U. S. 64 (F/32) on East-

man Panchromatic film; Wratten K/2 filter. for the partial eclipses, and 6 to 10 seconds at F/8 for Corona.

Another way of making up the record is shown on page 335. Data by the author follow: Made at a point in the lower part of Bronx County, New York City, where the duration of total phase was about 25 seconds. Two cameras were used. The 8.18 and 8.50 phases made with 9 x 12 c.m. camera, on Hammer Special D. C. Ortho. plate. Exposure $\frac{1}{100}$ second, F/44, through black filter, which was an exposed cut-film, not quite dense enough to use before the eyes, in looking at partial eclipse. Total phase; $2\frac{1}{4}$ x $3\frac{1}{4}$ Pocket Kodak; 18 seconds, F/11 without filter, on regular roll-film. For the 9.30 and 10.25 phases, the same camera was used and an exposure of $\frac{1}{100}$ second at F/32, through Kodak Yellow Color Filter, on roll-film, was made. All five negatives enlarged about twelve-times on K. 3 Novabrom, and the group copied on 9 x 12 c.m. Hammer Slow plate. Resultant negative enlarged to 8 x 10 on K. 1 Novabrom. All work done by author.

The picture on page 336 demonstrates that right in the heart of the great American metropolis, it was possible to successfully photograph old Sol, when he "went under". This might be called "Luna's Engagement Ring", for her engagement with Sol was announced to millions on that eventful day. Original and enlarged result are instructive. Data: Made in New York City, at 9.11 A.M. with 4 x 5 Premo; Planatograph, lens; using rear element (of $6\frac{1}{2}$ -inch lens) having a focus of $10\frac{1}{2}$ inches. Exposure one second at F/8 on the diaphragm scale. Film pack. Contact print on Gevaert Novagas. Enlargement on Carbon Black.

We are back to earth again "Washing Brother's Face", on page 337. This print carries a little laugh, and is technically good. Possibly if posed in more natural surroundings, near a sink or out-of-door washstand, it would be more realistic. Data: April; good light; south window. Autographic Graflex, 3a; Bausch & Lomb Tessar, 1 c. at F/4.5. Exposure $\frac{1}{10}$ second on Kodak film; Pyro in tray. Enlarged on Defender Velour Blk; M. Q. developer.

"Wolfeboro Bay", page 339, stands on its own merits as a fine record-photograph, which is, no doubt, all its maker intended. No data.

"Tierra del Fuego", page 340, gives us a graphic idea of the "land of fire". Being reproduced from a half-tone print, we cannot fairly criticise it, as the contrasty effect may be the result of faulty work in the half-toning which, by the way, was done in South America, not by our engraver.



Photography Is Wonderful

THE young man and the young woman were musing on the strangeness of life in general, a very favorite occupation nowadays when everybody is convinced that they have a special flair for soulness.

"Photography is a strange profession," said the young man, apropos absolutely nothing at all.

"Because it develops negatives?" inquired his companion with a knowing look.

"No, not that exactly. The other day I had my photograph taken in my riding things—not on horse-back, you know, just standing with my crop in my hand. Today the photographer sent me word that the portraits are ready, and do you know, he says that they are all mounted."—Exchange.



ON THE GROUNDGLASS

WILFRED A. FRENCH



Titles of Address

THE Publisher's Corner of the February issue contained a very just complaint that our women contributors—God bless them!—also those whom our jury has honored, and hopes to honor, often omit to give their titles of address. Consequently, neither we nor many of our readers know whether the lady in question is to be referred to or addressed as Miss or Mrs. If such an individual, for some reason, wishes to be known as a man, or writes her name so that it may reasonably be assumed that she is one, the Editors cannot be held responsible for the consequences, which, in any event, cannot be regarded as serious.

Still, it is an unmarried woman's privilege to insist that she be known as Miss so-and-so, so that, if her published portrait should make a special appeal to members of the male sex, she may be legitimately entitled to receive their attentions and perhaps, not be obliged to decline an offer of marriage. There is no accounting for the influence an engaging photograph of herself may exert upon the average impressionable man—young or old. Incidentally, I am not answering the question, "Does photography tell the truth?"

I have personally known a number of professional women-photographers who, though single, never used the title of Miss before their names. They appeared at photographers' conventions, year after year, where it became generally known that they were eligible to matrimony. Soon, several of them found partners and gave up their studios in favor of their new homes.

Women who are engaged in a professional career usually dispense with a title, be it Miss or Mrs. It is also the case with professional women-artists and authors, although histrionic artists cling to their maiden-name, even after they are married, and until they shall have withdrawn from the stage. The reasons are obvious. Thus nearly every motion-picture star, whose first requisite seems to be physical attractiveness, is married, yet she still appears under her maiden-name.

In photography, the woman-pictorialist should follow the custom of any woman who appears before the public, except the artist of the stage or the screen. She has attained an eminence that entitles her to this distinction. It matters not whether she be married or single. Thus, may we continue to know our pictorial workers and contributors as Gertrude Käsebier, Minna Keene, Fannie T. Cassidy, Anne Brigman, Millie Hoops, Alice Boughton, Emily H. Hayden, Laura Gilpin, Carine Cadby, Helen Drew, Sophie Lauffer, Doris Ulman, Clara Sipprell, Dorothy Jarvis, Eleanor F. Jones, and others worthy of mention.

American English

OUR readers may be aware that there is some talk in the daily press of making an American dictionary—a work that shall be devoted exclusively to American English. It is to consist of Americanisms or American idioms used in writing and speaking, as distinguished from those used by the people of England. There is no doubt that there are many words and phrases

used by our English cousins, some of which are unintelligible to most Americans.

I remember an experience I had at a hotel where I was staying when I visited England for the first time. This was in 1889. As the proprietor—a woman of refinement—met me on the morning after my arrival, she politely inquired how I had rested. After informing her that I slept comfortably and was feeling quite well, I asked, "And you, madam?" She replied that she had had a bad night and that she was feeling "— — —". I was horrified to hear the expression she used and tactfully said nothing. Asking a gentleman-guest at breakfast the meaning of the remark, as used by the lady, I was enlightened. He explained, laughingly, that she meant to say that she was not feeling up to mark, in fact—and then he repeated the seemingly objectionable remark, which (I did not tell my informant) is used by Americans to explain something different—a decided vulgarity.

So, having read my April Editorial, "American Camerists touring Europe", Americans who intend to visit Great Britain, may conclude that it is wise to practise both of two things. One is the avoidance of extravagant phrases and coarse, bombastic slang—lest they be misunderstood; and the other to understand the real significance of English colloquialisms before making use of them. In this case, the advice, "When in Rome, do as the Romans do", does not apply.

As the American tourist desires to make a good impression, he should consider the wisdom of using, recklessly, such Americanisms as, "Feeling fine and dandy" ("feeling fine" is sufficient); "Watch out!" "I'm on to you!" "I'm having the time of my life!" "You bet your sweet life" (even "you bet" has no meaning); "Now you're talking"; "Chewing the rag" (talking); "I'm starving" (only hungry); "I'm crazy (eager) to hear it"; "I'm dying (eager) to go"; "I'm crazy (enthusiastic) about him"; "I'm all in"; "limey"; "kike"; "dago"; "kick"; "hot dogs"; etc.

If an American wants to tell a foreigner that he or she is crazy, wild or dying (instead of eager) to do a certain thing, he will find that many English use the same absurdly extravagant remark. If an American lady is "simply roasting" (being very warm), it may cause a smile; but the implied painful state of being roasted alive may well be doubted.

Slang of the right sort, used with discretion, adds zest and color to the language. Much of it is intensely expressive and is virtually indispensable. When visiting foreign countries, however, the tourist should use it with caution and discrimination.

The Punster Still at Work

THE monthly meeting of the Union Camera club had been a marked success, which was not at all unusual. As the members were trooping through the exit and down the stairs, amid the pleasant chatter of the orators of the club, Thompson suddenly slipped and glided down the first-half of the uppermost stairway, where it was a little dark. Unhurt, he arose, remarking, in overseas parlance, and in his customary nonchalant way, "I should call that a *dark slide*!"



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Will Rounds Makes Unusual Picture

ONE of the most peculiar as well as the most touching incidents known to local photographers was reported yesterday by Will Rounds, the well-known Lowell photographer.

On February 12, the friends of Thomas H. McFadden, popular member of the City Council, were saddened to



CHILD'S FACE IN BOW

WILL ROUNDS

hear of the death at St. John's hospital of his beloved seven-year-old son, Thomas B. McFadden. The child was a lovable lad and not only were his parents almost prostrated by grief but hundreds of people throughout the city sent flowers and messages of condolence to the home of his parents.

The funeral was attended by an unusually large

number of people. A wealth of flowers was placed upon the grave; and they made the newly heaped up mound so beautiful that the parents determined to have a photograph of the grave made, to keep as a memento of their child and the kind sympathy of their friends.

Will Rounds was engaged for the work and in a couple of days had prepared a plate and printed the pictures. He showed them to Mr. and Mrs. McFadden and while they were examining them closely they found, nestled among the flowers, a tiny picture of a child's face. The face is very clearly defined and well proportioned, and although it is very small the features stand out in such relief that it might be thought to be the work of an artist.

The most peculiar part of the incident is the fact that the picture bears a striking resemblance to the dead boy. No one who has seen the picture has been able to offer a satisfactory explanation of how it came into existence. There was no picture of the child among the flowers on the grave and the photographer knows of no way in which the likeness could have been introduced into the proof or the print. Mr. Rounds says that he did not notice the phenomenon until it was called to his attention by Mr. McFadden. He is of the opinion that there must be some natural explanation of its presence but is at a loss to find that explanation.

The picture has attracted the attention of many local people, among them an expert on psychic phenomena, but no one has as yet given a probable explanation.—*Lowell Courier-Citizen*.

[In order to save space, only that part of the picture which contains the child's face is here reproduced. Look for face in center of picture under large bow.]

EDITOR.]

Ammonium Persulphate in Pigment Printing

It is well known that when ammonium-persulphate is used on photographic prints a softening of the gelatine-coat is produced, and this fact can be utilised in the pigment-process when an under-exposed print refuses to develop, by soaking it for half an hour in a 5 per-cent. persulphate-solution, after which it can be developed into a normal print.—*Exchange*.

Thermo Development Card

THOSE of our readers who like to develop films and plates by the time-and-temperature method will be interested in the carefully revised Thermo Development Card, published by the American Photographic Publishing Company, 428 Newbury Street, Boston, Mass. On this card will be found several helpful tables and an excellent explanation of the Watkins system of development. A very complete list of thermo developing-speeds of plates and films will be found of service. These cards may be obtained for 35 cents. There is much to recommend this method of development. Particularly is it valuable to those who wish to obtain a grasp of photographic fundamentals.



THE STEREOPHOTOGRAPHER



Stereo-Views with One Camera-Lens

EDITOR PHOTO-ERA MAGAZINE:

The article on stereo-pictures by Mr. Hotchkiss, in the April PHOTO-ERA, interested me greatly because I have lately been making stereo-views with an ordinary small camera. The method is inconvenient; but it has one advantage over the use of a stereo-camera in that the distance between the two points of view can be made great enough to bring out in relief a far away principal object. A writer, in the *British Journal of Photography*, suggested that the distance between the view-points should be 1 to 5% of the distance to the principal object. This is illustrated by the enclosed prints—not clear enough to reproduce, I fear—of part of Montreal taken from Mount Royal. The exposures were made at points thirty yards apart and a grain-elevator nearly two miles away can be clearly seen to be farther off than the nearby towers of Notre Dame. A dip just behind the office buildings, which marks an ancient shore-line, can also be made out. I was told today that in making aerial surveys of Northern Quebec stereo-views are obtained by making exposures fifteen seconds apart from an airplane, say 7000 feet up, and going at about eighty miles per hour. This gives a wide angular separation of the pictures, and so the unevenness of the ground is much exaggerated.

F. H. YORSTON.

MCGILL UNIVERSITY, MONTREAL, CANADA.

Uneven Halves of Stereo-Negatives

STEREO-PHOTOGRAPHERS need not be discouraged should they perchance fail to get both halves of a stereo-negative or positive of exactly the same density. Such difference on a negative may be reduced, if not entirely corrected, by modifying the printing-time for each part of the negative. Even extreme cases are not hopeless. Furthermore, the positive prints need not be absolutely uniform as to density, tone or brilliance.

One of twin shutters may unexpectedly and provokingly fail to function properly, causing, as in the accompanying illustrations, wide variation in exposure. Yet, with modified printing the paired views when superimposed by the stereoscope, produce not altogether displeasing pictures.

By examining the illustrations and noting the reference to each, which follows, the reader will understand the foregoing suggestion.

Figure 1.—Old Roman Wall along River Sarthe, Le Mans, France. Unmodified print from stereo-negative showing marked difference between views.

Figure 2.—Napoleon Arch, Place du Carrousel, Paris, France. Unmodified print from stereo-negative showing an extreme difference in the two views.

Figure 3.—The stereo-print is easily modified by using more contrasting paper to add snap to the weaker view, but in transparencies where both views are necessarily made upon one plate, exposure modification will reduce the difference sufficiently to give a pleasing picture when viewed in a stereoscope. F. L. GOLL.

Cut-Film for 6x13 cm. Stereo

I ENCLOSE a negative made with my new 6 x 13 cm. stereo-camera—Monobloc—illustrating a practical use



1.



2.



3.

FIGURES 1, 2 AND 3

F. L. GOLL

of a section of 5 x 7 cut-film, cut especially for use in this size of camera. In my notes on cutting up cut-film, I mentioned that the 5 x 7 size would make three pieces about $2\frac{3}{8} \times 5$, which, although somewhat smaller than the standard 6 x 13 cm. plate, would do.

I have also intimated as much to several stereo-enthusiasts with whom I correspond, and some have thought that because the film would not be full 6 x 13 size, that it would not work satisfactorily.

CHARLES FRANCIS HAMILTON.

[We have examined the 6 x 13 cm. cut-film negative and the print sent by Mr. Hamilton. We find that what he suggests in his note is entirely practical and we believe that the idea should be of value to stereo-workers. EDITOR.]



THE AMATEUR KINEMATOGRAPHER

HERBERT C. McKAY



The Amateur Kinematographer

THERE is no doubt that the miniature motion cameras will give rise to just as much ingenious discovery among the amateurs as have the small still cameras. I have just received a very welcome letter from Mr. Hamilton Riddel of Milwaukee. I shall not give it in full detail; but will discuss the more important points brought out.

Mr. Riddel has had recourse to the ordinary intensifiers in cases of overexposed negatives. He states that he is not sure of the ultimate action of such treatment. The action is just the same as that which occurs in intensifying any film. With most of the usual commercial intensifiers the image will fade after a time unless the film is given a bath in a developing-solution, subsequent to intensification. When such a procedure is necessary the manufacturer's directions will indicate the fact. A two-solution intensification, such as the common mercury method, should give an image as stable as the original image. In fact, when but slight intensification is desired, sepia toning with a mercury bleach will give the image in stable silver sulphide which is more permanent than the original metallic silver-image. There is no reason that such treatment should not be most valuable.

Mr. Riddel states that he makes titles at a distance of three feet with stop F/3.5 and with one 250-watt mazda lamp as the illuminant. This is a procedure which is at variance with my experience. I am inclined to think that the protected image is not very large. In the first place, Mr. Riddel uses a camera with a fixed-focus lens so that for sharp definition at this distance, I should think a smaller stop necessary. I mean by this, the ultra definition necessary for sharp projection of an image, say five feet high. Then, the use of a single lamp is a problem. I have made many feet of titles in professional work and one of my gravest problems has been that of balancing my lights so that one portion of the title should not be more highly illuminated than another. However, try it out for yourselves. I might be wrong—but frankly I think that at least two lights are necessary for satisfactory title-work.

I am going to digress from Mr. Riddel's letter for a moment. If you wish to make titles easily and quickly, yet sacrifice no quality, purchase one of the common changeable sign-boards used in offices and stores. The kind which uses cut-out celluloid letters is best. This will enable you to make beautiful titles without loss of time. Bell & Howell supply such an outfit at a very reasonable price.

To return to our correspondent. He states that he has used the Velox watercolors successfully as a means to tint his film. He sent me a strip of a blue-tinted film made in this way which appeared to be in every way satisfactory. There were no signs of bleeding which is the great bugbear in laboratory toning of the usual type. I should suggest, though, that such toning be done with very weak solutions and repeated baths or else that sample strips be tinted before the long strip is attempted.

The value of tinting a motion film is not fully understood by the public. I should say that about ninety per cent. of the professional films are tinted. This is

not really apparent, for only the strong colors such as the amber, blue and red are noticeable. The more common delicate colors, of which yellow and lavender are common examples, pass unnoticed, but give a great increase in pictorial quality. I should advise every kinematographer to experiment along this line. It will certainly repay him. There is a most valuable manual published by Eastman which deals with tinting and toning motion-picture film. A full set of sample films is included with the book which sells for \$2.50.

Mr. Riddel closes his communication with a statement which comes as an entire surprise to me. He states that he obtains satisfactory reversed motion results by merely turning his camera upside down. Simple yet effective! Long habit with the professional camera and tripod naturally precludes such a suggestion occurring to the professional. This only goes to illustrate the fact that a hearty co-operation among the amateurs will result in the accumulation of a common fund of knowledge which will be of untold value.

Let us now consider the question of an organized society. Mr. Barleben, who has contributed to these columns as well as Mr. Riddel and Mr. Harry Schultz of Astoria, Long Island, have written very encouraging letters concerning such an organization. So far the favored plan approximates this.

Specific organization.

A nominal annual fee, probably not to exceed \$5.00.

An organization bulletin. This purpose will be served by this department in PHOTO-ERA MAGAZINE, for the present at least.

Some arrangement for the interchange of films.

A small emblem of recognition distributed to members at slight cost.

The purpose of the organization would be to facilitate the interchange of ideas, and of films. With the growth of the organization other aids would be attempted. In short, the society will be established for the aid of every member in every way possible. Soon, I hope, there would be started a department for sales-aids. There is no reason that the small cameras should not produce dividends.

This month Mr. Barleben, whom you will remember, gives us a sketch regarding the place of women in kinematography. I have heard of one fair kinematographer; but I never had the pleasure of meeting her. As the cameraman in the studio has an assistant to carry his equipment, the physical hardships form no obstacle to the entrance of women into the profession. To my mind, though, there is one objection. I have found that women who possess artistic instinct also possess temperament in alarming proportion. The cameraman must be an artist, a scientist and a diplomat. Hence the paucity of really successful cameramen. If the woman can retain her artistic instinct and repress the temperament, there is no reason that she should not succeed in this work.

Finally, I wish again to say that the editor of this department wants to hear from every individual enthusiast who reads PHOTO-ERA MAGAZINE. Only by helpful correspondence may we attain the greatest good of the greatest number—for kiné-enthusiasts. The editor of this department may be addressed directly at Eustis, Florida.

Women as Kinematographers

WHY is it that we have no—or at least, very few—lady kinematographers? Many women make their living with still-photography, so why not kinematography? Of course, it must be remembered that the usual professional motion-picture outfit is quite heavy, and a bit too much for the average woman to handle. Personally, I have never heard of a woman-kinematographer, and the above reason is the only one which I think is the cause. For motion-picture photography is not a soiling profession, nor is it hard in the sense of labor. Yet, the ladies are content to let us men reap the honors (?) as far as motion-photography is concerned.

But now, with the birth of the tiny sub-standard camera, the fair sex cannot evade the subject and get away with it by saying that the camera is too heavy. For, if they are able to carry a Kodak, they surely can handle a sub-standard outfit. And there is no reason for a lady not becoming as adept with a "black box" as the best of men-kinematographers. In fact, some women have demonstrated their skill in still-work, and there is no reason left that they shouldn't be as skillful in kinematography.

So watch out! Some day you may come across a fair camerawoman in your travels. But instead of a heavy outfit consisting of camera, magazines, tripod and cases, she will have just a little leather-case which contains a small sub-outfit. No tripod, just a strap to put around her neck as a support for the camera. Instead of grinding a crank, she will merely press a button, and a motor will do the rest. Well, as long as they don't tie a pretty pink ribbon around said camera, I won't mind.

KARL A. BARLEBEN, JR.

Ciné Club of America

EDITOR OF PHOTO-ERA MAGAZINE:

We have been reading your interesting articles in the last few issues of PHOTO-ERA MAGAZINE on the Amateur Kinematographer. The articles by Mr. McKay would give any one the impression that very little or nothing had been done toward the formation of amateur kinematography clubs for the benefit of the 16-millimeter motion-picture fans.

We just wish to advise you that the Ciné Club of America has been in the ring since July, 1924, and although we are not advertising the good news in the *Saturday Evening Post*, or on big display sheets, we have been going along slowly and surely.

Just as soon as we get our literature and printed matter up to date and revised, we shall be glad to mail full particulars to all 16-millimeter fans or any one who wishes to know about the Ciné Club of America—the main feature of which is the Membership Film Exchange.

Let us have more Amateur Kinematography in PHOTO-ERA-MAGAZINE; but please, keep it amateur.

86 LaBelle Ave.,
Detroit, Mich.

CINÉ CLUB OF AMERICA



Another Photograph of the Moon

MADE with a 2-A Folding Brownie, set on a cement embankment at the water's edge; exposed eighteen minutes; made on the night of September 17 at 9:30 Central Standard time. The camera faced the east—slightly north, of course. Lake Michigan is just beyond the trees. The waters visible in the picture are those of the lagoon which connects with the lake by a narrow neck to the left side of the picture—not visible. On the shore of this lagoon where the camera was



THE MOON

ELIZABETH LIECHTY

placed, is the Coast Guard Station Number 279 situated in Jackson Park (Chicago)—one of the parks under the direction of the South Park Commissioners.

The end of a plank, visible in about the lower center of the picture, is the end of the north wall of the entrance of the Coast Guard Station to the lagoon. The tall frame-work, scarcely visible, to the left side of the picture is the search-light tower at the Jackson Park Bathing Beach—this happens to be on the other side of the narrow neck which connects the lake with the lagoon.

The trees are on the west side of an elevated peninsula with a stone wall around it—this peninsula forms a blind-boulevard, from which the lake, lagoon and park can be viewed. Below the level of the tops of the trees are visible two street-lights. The reflection of these is seen on the lagoon water, along with the reflection of the moon. The light-spot just below the street-light to the right side of the picture is a lighted portion of the wall which encloses the peninsula; that is, light from the street-light just above it falls upon the wall here and in this picture happens to be reflected.

ELIZABETH LIECHTY.

[We are indebted to Miss Liechty for her kindness in sending us this picture and giving us the data. The point is not that it is to be considered an example of astronomical photography but rather that it shows what may be done with a modest equipment and what happens when the ordinary camera is used to photograph the moon. EDITOR.]



THE MILITARY PHOTOGRAPHER

CAPTAIN A. H. BEARDSLEY, SIGNAL-RES.



Official Photograph, U. S. Army Air Service

Courtesy National Geographic Magazine

FOKKER AIRPLANE ABOVE DAYTON, OHIO

SAMUEL M. BURKA

The C. M. T. C. is Making Good

It takes time to make clear a purpose, especially when some individuals or organizations misunderstand and even oppose what proves, in the end, to be a progressive step. Sentiment all over the country is changing with regard to the Citizens Military Training Camps. Those who could see no good thing in the idea, now admit that it has become a splendid factor in producing and developing American citizenship. The military part of the camps is negligible, in the sense that it might arouse a love of war. The emphasis at all C. M. T. C.'s is placed on physical improvement through supervised athletics, recreation and education by means of interesting lectures and demonstrations. There is very little more military discipline than is required and expected at first-class private summer camps for boys. What is more, respect for the flag, law and order and prompt obedience are usually taught best under military regulation.

It has been my privilege to study the matter of the C. M. T. C. from the angle of the boy and his parents and from the angle of an army officer as well as that of the civilian. Moreover, I have been with the boys at the C. M. T. C. and know from first-hand knowledge just what happens at these camps. With virtually no exceptions, when the boy and his parents understand what the C. M. T. C. is trying to do, any questions or

complaints while at camp are cleared up and the boy returns to his home an enthusiastic member of the C. M. T. C. Obviously, the boy who cannot make good at a private or public school will, in all probability, fail to make good at the C. M. T. C. It should be remembered that each boy who is accepted for camp must be of good moral character and physically fit. President Coolidge's own boy is a member of the C. M. T. C. and will be at camp this year. This speaks eloquently for the type of boy who is encouraged to go and is heartily welcomed.

Incidentally, the quotas are being filled rapidly; and, owing to the increasing popularity of these camps, it is now necessary to act promptly in order to be a member this year. Those who waited too long last year to make up their minds lost their opportunity. Remember that these camps are for thirty days duration and for boys between the ages of 17 and 24 and may be enjoyed at no expense to the boys or their parents. What a splendid vacation this is for the young men of our country!

Those who are still inclined to question this nationwide movement will do well to visit one of these camps during the coming summer. Unless I am very much mistaken, the opposition will be turned to enthusiastic support, and a deeper respect for American Citizenship and our flag will be the result.



LONDON LETTER

CARINE AND WILL CADBY



WE have often in these notes stressed the point of the importance of aerial photography which is only now being gradually realised by the general public. But as proof that this branch of the craft is forging ahead we must record that the Aircraft Operating Company, which is entirely unsubsidised, and has done much to promote the use of aircraft for surveying-purposes, has taken over "Aërofilms"—a company which specialises in making both ordinary photographs and kinematograph films from the air. This absorption undoubtedly shows that a progressive policy is to be pursued in demonstrating, and so advertising, the value of the aerial camera, both for scientific and popular purposes.

The most important work in which Aërofilms is engaged at present is an air-survey of London. Arrangements are well advanced and actual surveying only awaits suitable weather-conditions. So the possibilities of aerial survey-work by the camera are at last being recognised; and, although most of its exponents do not claim that it can supersede the ground survey, there is no doubt that it can effect a striking economy in time and labor in conjunction with it.

The new German film, "The Last Laugh" has been running in London now for nearly three weeks. We photographers cannot help being interested in film-work, however often our high hopes are dashed. Optimistically, we are always expecting that at last we are going to see the perfect production, where the tale will be told with really pictorial representation. And time after time we are left disappointed and wondering why the producers did not seize their many opportunities for real artistic expression.

Having time to spare on a visit to our new picture theater, the Capitol, we sat through the curtain-raisers: the news of the day, races, football, royalty at functions, etc.: also a comic—or would-be comic—American knock-about farce, and a stodgy English North Sea fishing-episode, which consisted more of lengthy captions than pictures, until there came the ten minute tea-interval. After which at last—"At Long Last" as a member of the impatient audience audibly remarked—"The Last Laugh" was announced. However boring the preliminary entertainment had been, it served its purpose as a contrast, and opened our eyes afresh to the extraordinary merits of German film-work. How remarkably they have taken the lead, and on to what a totally different plane they have raised the "movies"! "The Last Laugh" is probably known in America and no doubt Herr Jannings is appreciated by the American public; also possibly the audiences in the States are accustomed to work of a high order; but here, in London at our finest and most modern kinema theater, the contrast of American and English work to the German was lamentable.

The action of "The Last Laugh" moves around the character of the old hotel-porter in uniform (Herr Jannings) and the tale is told so well in pictures, and the sequence of events so clearly presented to the eye, that no captions are required. This in itself is a big step in the right direction, for we were becoming very wearied of the lengthy captions and short reels of pictures. One does not go to the kinema to *read*, that can be

done far more comfortably at home where there is no straining the eyes at dazzling though dreary letterpress. The pictorial effects of the film are a delight to photographers, and come up to our imaginings of what a film should be. We are shown an old bit of some German town in the late evening, the street-lights and those at the windows go out one by one, 'til the night is black. Then dawn comes faintly with a few creeping shadowy forms, early morning brings more; and, by the time the sun strikes the houses, the street is awake, and in true Teuton fashion, the beds are being aired at the windows. How in the world do they do it, for there are many other marvelous effects of light so uncannily true to nature; but this coming of the day in an old German street was one of the most impressive.

The Prince of Wales on his tour to Africa and South America in the battle cruiser "Repulse" carries with him a very complete photographic outfit. Accommodation is provided for two kinematograph operators and a photographer, who have been given a well-appointed darkroom. The custom of filming the incidents of Royal voyages first started twenty-five years ago when the King, then a captain in the Navy, commanded the cruiser "Crescent". The results formed the chief items of one of the first public exhibitions of living pictures of the Navy ever given. Again, in 1901, when the King and Queen toured the Empire in the "Ophir", a kinematographer accompanied them, and it has been a regular custom on Royal tours ever since.

The Navy, of course, has its own school of photography. There are kinematographers, ordinary photographers and scientific exposers, for the uses of the craft are wide and varied in the Senior Service, gunnery forming a very important branch. But the Navy is not supplying the photographers who are accompanying the Prince on this tour. They have all been chosen as specially experienced in making pictures for newspaper-illustration and public exhibition. As the films are completed, they will be sent home to be viewed privately by the King and Queen, and one's sympathy and interest cannot help being extended to the Royal parents at the thought of their "reading" the doings of their son in this graphic way while he is yet making history. The most accomplished writer could not approach the vivid reality of such records. Later, the films will be issued for general exhibition, and no doubt will find their way into every corner of the Empire.

The Co-operative Advertising Scheme has borne fruit in one way, if not in the one intended. There are too many old-fashioned photographers who prefer living in a rut, consequently it has not succeeded in collecting the several thousand pounds necessary for its activities, so that, for the next two or three years it will be in abeyance. But it has separated the sheep from the goats. Presumably the goats are the non-subscribers, although we know no reason that this usually docile animal should have a slur cast on it. Anyway, the scheme has attracted all the live and progressive photographers and has brought them together in a remarkable way. In London, and in the larger provincial towns, photographic workers have come together; there have been lectures, discussions,

conferences, lunches, dinners, and the outcome of this bringing together of the best photographic brains has been a stimulation of the profession as a whole. New ideas and more progressive methods have caught on, and a comradeship has been established between those who had formerly looked on each other as rivals. The standard of professional portraiture is being raised; and we should not be surprised, when next the advertising-scheme is pushed, that many of the goats have turned into good reliable sheep, determined to support those who are trying to help them.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

TELEPHOTOGRAPHY, by Cyril F. Lan Davis, F.R.P.S. Third Edition, by Israel Davis, M. A. 112 pages, 19 full-page plates, seven diagrams and index. Price, stiff paper-cover, \$2.00. London: George Routledge & Sons, Ltd.; New York: E. P. Dutton & Company, 1924.

The fact that this excellent textbook on telephotography is now in its third edition is evidence enough of its practical value and popularity. Additional matter and illustrations have been added and the book may now be said to be the last word on telephotography. We have reviewed the earlier editions at length and can only add again our approval and recommendation. However, the chapter on telekinematography is new and important, and certain other material will be of great interest because it is brought up to date. The book fully deserves the success it enjoys.

THE ART OF THE VATICAN. A Brief History of the Palace, and an Account of the Principal Art-Treasures within its Walls. By Mary Knight Potter. Illustrated. Decorative Covers. 345 pages. Complete Index. Price, \$3.00. The Page Company, publishers, Boston, Mass.

Of all the cities of the old world, Rome is the most important, historically. It is the veritable Mecca of European tourists. Instinctively, their first thought leads to St. Peters, the largest and most imposing cathedral in the world. Adjoining is the Vatican, the celebrated palace of the popes, of which the finest parts are the Sistine Chapel—the crowning beauty of whose mural decorations are the ceiling and the Last Judgment by Michelangelo—and the Stanze of Raphael. The Picture Gallery or *Pinacoteca* is comparatively small, but contains a number of masterpieces of the Italian Renaissance, one of them, Raphael's Transfiguration, being regarded by many authorities as the greatest picture in the world. Other priceless paintings are Raphael's Madonna di Foligno; Domenichino's St. Jerome; Titian's Madonna of Niccolo dei Frari and an Entombment by Caravaggio.

The sculpture-galleries, filled with masterpieces of the best periods of Grecian and Roman art, stand unrivaled in the art-world. Chief among these are the

Apollo Belvedere; the Laocoön; the Torso Belvedere (greatly admired by Michelangelo); the Mercury; the Apoxyomenos; the Discobolus (discus-thrower); the Crouching Venus; the Aphrodite of Cnidus; the Eros by Praxiteles; the Sleeping Ariadne; the Venus Anadyomene and the head of the young Augustus. They are but a few of the several hundred statues known to every art-lover. The author of this illuminating review of familiar art-treasures of the Vatican has shown rare and discriminating analytical ability and, aided by a series of admirable photographic illustrations, is sure to give much pleasure and knowledge to interested art-lovers—particularly those who intend to visit Rome this year or at some future time.—W. A. F.

THE HUMAN FORM AND ITS USE IN ART, by F. R. Yerbury and G. M. Ellwood. 47 text pages, 110 photographic illustrations and 9 figure-drawings. Price, cloth, \$8.00. Boston: American Photographic Publishing Company, 1924.

No doubt there are a number of our readers who are interested in the application of the human form to pictorial illustration. This necessitates a study of the semi-draped and the nude human form of men, women and children. Although PHOTO-ERA MAGAZINE does not publish pictures of the nude and believes that many so-called "art-studies" do not merit the title; yet, in the case of this book, we believe it will serve those who are working sincerely to bring out true beauty and art by means of the nude. The text and illustrations will be found very helpful. The book is well printed and well written.

GREAT SOUTHERN HOTEL,
KILLARNEY, April 15, 1925.

DEAR MR. BEARDSLEY:

If ever there was a locality that deserved the designation of a paradise for camerists, in its truest sense, it is Killarney, situated in southwestern Ireland. Its great natural beauty attracts visitors not only from the United Kingdom, but from America. Today, in the great dining-room of this magnificent hotel, I observed many Americans, most of whom were from Massachusetts. Tomorrow, a large party (including Mr. and Mrs. French) will spend the day visiting the, to me familiar, scenery of such celebrated places as Gap of Dunloe, Macgillicuddy's Reeks, Lakes of Killarney, Muckross Abbey, Ross Castle, Island of Innisfallen and Torc Cascade. These are only the principal objects of interest in this delightful country, made familiar by the inspiring verses of Thomas Moore, the Irish poet. Although I made many photographs in this region—during my first visit, in 1890—I am ready, tomorrow, to expose several rolls of film on spots that eluded me on a former occasion. Several members of our party are provided with kodaks, my own being a No. 3A Autographic. If all goes well tomorrow, a grand total of about forty rolls of film will record the beauty-spots of the Killarney Lakes, including the lofty Macgillicuddy Hills which smile upon me from my hotel-window, as I pen these lines.

WILFRED A. FRENCH.

The Lure of Motion-Pictures

THE benevolent old lady was about to drop her usual coin in the hat of the blind beggar at the corner. "You don't seem to be the same man who sits here always," she remarked. "No, lady, he's my brother." "I hope your brother is not ill," she went on. "Oh no, mum," was the unexpected answer. "He's taken an afternoon off an' gone to the movies."—Exchange.



HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.



Our Associate Editor in Ireland

QUEENSTOWN (Cobh), IRELAND, April 13, 1925.

DEAR MR. BEARDSLEY:

Had a delightful voyage on the steady, comfortable and well-equipped Cunarder "Aurania". Weather exceptionally fine all the way, and pleasant fellow-passengers. Arrived yesterday. Spent the night here. Today, sight-seeing in picturesque Queenstown situated, like Quebec, on a hill. Took pleasant drives in jaunting-car about the town and neighborhood. Innumerable, attractive camera-views. Queenstown inalienably associated with American Navy (Admiral Sims) during World War. Had pleasant day with spring-flowers in full bloom, blue sky and music from numerous song-birds, including our friend, the mocking-bird. Off this afternoon to Lakes of Killarney with its hills and dales. Several days there; then, via Dublin, to England!

Best wishes to all.

WILFRED A. FRENCH.

Show of the International Circle

THE First Annual Exhibition of the International Circle of Pictorial Photographers took place at the Walker Art Galleries, Liverpool, April 4 to 18, 1925. The expressed purpose of this new body of pictorial workers is to promote International exhibitions and to foster and exhibit new work, and, indeed, the prints shown here were largely by workers not known internationally. Although the catalog did not include such names as Mortimer, Adams, Lewis, Basil, Keighley, Crooks, Whitehead and Lambert, it listed names of workers less well known, but of sterling ability. The show itself, consisting of 266 prints carefully selected by a committee of thirteen competent men, was one of surpassing excellence. A pleasing feature of the exhibition was the work of twenty-three Americans—Alcock, Blickensderfer, Dassonville, Duroe, Ervin, Hanna, Harding, Haz, Henry, Herrick, Hussey, Kunishige, Lauffer, McBride, Macnaughtan, Montgomery, Muray, Pardoe, Ruzicka, Shields, Smith (Kenneth), Squier, and Vail (Floyd), which received well-merited approbation. The Photo-Amateur Club of Copenhagen—whose work and activities were the subject of an illustrated article in PHOTO-ERA MAGAZINE several years ago—was represented by fourteen members. It created a very favorable impression.

Among the prints of outstanding merit the writer was able to observe before the collection had been entirely removed from the walls, after the closing day, were "Venice", Dr. Ruzicka; "Havre", J. C. Marburg; "The Gleam", C. J. Symes; "Une-Frieze", (three semi-dressed female figures standing in a row); "George Bernard Shaw" (portrait), C. A. Ealand; "A Sunny Corner—Salzburg", James McKissack; "The Day's Work Done" (landscape), Sam Weller; "The Coming Shower", W. J. Roberts; "Skelwith Force" (waterfall), C. M. Warlow; "When the Heart is Young", Mrs. A. I. Whitaker; "Menai—April Evening", W. H. Hadley; "Farrington Street", William T. Owen; "Trouville Harbor", James McKissack; "The Winding

Lea", W. J. Roberts; "A Fisherman—Lac Leman", Herbert Berstow; "Limehouse", William T. Owen; "The Approaching Storm", Rawald Rigby; "In the Alps", Wm. Rung; "Lora Vinci", Nickolas Muray; "The Dancing Girl" (nude), Eugene P. Henry; "Limehouse", W. T. Owen; "The Ebb Tide", Robert Ferguson; "Eryngium—An Arrangement" (floral), Ella E. McBride; "Going to School", O. E. Daroe; "A Zuni Home", Forman Hanna; "In the Morning Sun", Nickolas Haz; "Mending the Fishing-Net", D. Duckert; "The Old Warehouse", Julius Miller; "Eileen", Arnold E. Brookes; "At the Exhibition", W. A. Blanchard; "Ships that Pass in the Night", Dr. J. B. Pardoe.

Among the printing-mediums used, straight bromides predominated; then came bromoil transfers, followed by bromoils. The prices attached to the prints ranged from £ 1-10-0 to £ 5-5-0, eight prints glorying in the maximum price, and two of these were sold! It is the intention of the committee to encourage high prices, as its members believe in this idea promulgated by PHOTO-ERA MAGAZINE.

W. A. F.

Three New Members of the R. P. S.

IT is with personal pleasure and satisfaction that we record the election of Dr. J. B. Pardoe, Bound Brook, New Jersey; Dr. K. Koike, Seattle, Wash., and Kenneth D. Smith, New York City to membership in the Royal Photographic Society of Great Britain at the February, 1925, meeting. This good news arrived too late for our May issue. We hope that these earnest and accomplished workers may attain new heights of pictorial success. To them PHOTO-ERA MAGAZINE extends its sincere congratulations and good wishes for the future.

True Irish Hospitality

NOT content with bespeaking native and English hospitality for our touring Associate Editor, Mr. William Harding, editor of *The Camera*—the only photographic magazine published in Ireland—practised this virtue personally by entertaining Mr. French and Mrs. French at his attractive home in Blackrock, a residential suburb of Dublin, on April the 19th.

Assisted by his charming wife and brilliantly educated young daughter, and amidst refined and artistic surroundings, the accomplished journalist entertained his guests in delightful fashion. Among other topics of interest, he unfolded his individual plan of federating the various organisations of photographic manufacturers, dealers and photographers (professional and amateurs) with a view towards mutual benefit and greatly increased influence in the photographic world. This amalgamation is already firmly established, thanks to the enterprise, energy and personal effort of its originator, who visited England for that purpose. It is bound to become a powerful factor in the industrial and artistic activities in Great Britain, and its influence will be felt even in the United States, where a movement of a similar character may seriously be considered.

Newark Camera Club Elects Officers

APRIL 19, 1925.

MY DEAR MR. BEARDSLEY:

I thought you might be interested, as a news-item for PHOTO-ERA MAGAZINE, to know that at our Annual Meeting, held Monday evening, April 13, the following officers were elected: President, Louis F. Bucher; Vice President, Otto A. Ledig; Secretary, William L. Woodburn; and Treasurer, Julius F. Graether.

The following were also elected to the Board of Trustees: Three-Year Term, Edward Browaski, Charles A. Knapp and William S. Tyler.

To fill unexpired term Alexander N. Pierman.

W. L. WOODBURN, *Secretary*.

About a Diffused-Focus Lens

WITHIN the past year or two Sigismund Blumann, Editor of *Camera Craft* and M. C. Williamson, contributor to *Abel's Photographic Weekly*, wrote articles on the Wollensak Verito Lens which proved to be so helpful to users of this diffused-focus lens that the articles have now been reprinted in an illustrated folder entitled "Concerning the Verito". In view of the large number of our competition pictures which are made with this lens, we believe that our readers will be interested to obtain this new folder from the Wollensak Optical Company, Rochester, N.Y.

Seattle Camera Club and "The Notan"

WE regret that we are not able to read Japanese and thus derive pleasure and benefit from examining the twenty-four page bulletin, "The Notan", published regularly by the Seattle Camera Club, Seattle, Wash. The bulletin has four editors, Dr. K. Koike, R. Azuma, Y. T. Iwasaki and S. Kashiwagi, with Glen Hughes, associate editor. A charge of ten cents a copy or one dollar a year is made. Each issue contains several illustrations and includes advertisements from leading photographic supply dealers.

In a later issue we shall reproduce several of the pictures made recently by members of the Seattle Camera Club. This organization is growing steadily and now includes fifty-two members, of which four are Americans. Further information about applications for membership may be obtained by addressing Dr. K. Koike, 422½ Main Street, Seattle, Washington.

Some Good "Proofs"

WE have been following with interest the development of the little bulletin "Proofs" issued monthly by the Dallas Camera Club, Dallas, Tex. For several years this well-edited little publication appeared in mimeograph form; but now it is printed on coated paper-stock and has an illustrated front cover, and everything. May it continue to grow with the splendid camera club it represents.

Dr. J. B. Pardoe Is Interviewed

It is always of interest to obtain a closer acquaintance with well-known persons, either by reading a carefully prepared interview or by personal contact with them. Recently, *The Sunday Times*, New Brunswick, N. J., contained an illustrated feature article on Dr. J. B. Pardoe and his dental and photographic work. We had the pleasure to meet Dr. Pardoe at the Exposition of Photographic Arts and Sciences in New York City and we are glad that by

means of this well-written interview the man and his work will become better known. The personal, friendly relationship between Dr. Pardoe and PHOTO-ERA MAGAZINE was established a number of years ago. We rejoice in his success, and he has our sincere good wishes for future pictorial honors.

Interesting Photographic Course in Mexico

OUR readers are familiar with the work of Clarence H. White who is lecturer on photography at Teachers College, Columbia University, New York City and is head of his own summer and winter school of photography. This year Mr. White is offering something new in the form of a Mexican trip and photographic course with headquarters in Mexico City. The month of July will be devoted to this unusual course. Those who are interested will do well to obtain further information direct from Clarence H. White, 460 West 144th Street, New York City.

An Unusual Request for Photo-Era

WORTHY ADMINISTRATION: I ask you kindly for a proof paper from your delivery. If it should please me, then you can find in me a customer. Of all falls, I await kindly the sending from a delivery maybe to advertise in your paper, also you can put the price from advertisement to it.

[Verbatim extract from German correspondent asking for specimen copy. EDITOR.]

Courses in Photography in Los Angeles Schools

THE Roosevelt High School is situated in Los Angeles, Calif., on the east side of the city in a district where the pupils are from families in moderate circumstances. For this reason it is largely a vocational school. In February, 1924, a course in Photography was introduced by Mr. Claude Edward Sparks, a man who had spent twenty-two years as a photographer and was a high school graduate and later was granted a Smith-Hughes credential of the Vocational Arts, secondary type, for the position as instructor.

A photographic laboratory was installed and an adjoining office was used for a class-room. The instructor was, at first, employed for only half time. It was announced to the students that they might have a choice between photography and art-appreciation for graduation credits; but one or the other is required. The enrollment was so large that Mr. Sparks was given three-fourths time; and, as the classes enlarged the second term, he was given full time. The classes were limited to twenty students each and included Junior and Senior pupils only.

The students are first taught the use of the camera, how to load and unload, the correct stops and time to use for all conditions of light, both indoors and out. They are then taught to weigh their own chemicals and prepare their own developers and fixing-baths for both films and paper. Lessons are given in composition, landscape-photography, home-portraiture, interior and architectural photography, artistic photography and moving objects. PHOTO-ERA MAGAZINE is used in the class-work as reference and has proved very valuable.

Next is taught enlarging, sepia-toning, flashlights and field work with the view-camera. The student is taught to become thoroughly familiar with this camera and in the third term is allowed to work without aid from the instructor. Studio-portraiture is also a part of the course, copying of old photographs and making lantern-slides.

The Board of Education furnishes all equipment and the first supply of paper and chemicals. As soon as the student is able to print and develop, he brings in his own orders, pays the instructor for his paper and develops and prints his pictures and returns them to the owner and collects for them. From the fund thus supplied the instructor purchases fresh supplies of paper and the pupil makes the profit. In this way plenty of work is on hand at all times and the student is responsible for it.

All of the group-pictures, portraits of the Senior classes, student-boards and activities for the *Annual* are photographed and finished by the classes, two students acting as *Annual* Photographers. The High School has an enrollment of over 1700 students and there is ample opportunity for practice in making and finishing pictures.

Next term, (4th) the Photographic Department will have a larger room and the students will be taught retouching, spotting and background work. Over ninety students are enrolled this term. This course has proved very popular and not expensive, as it finances itself after the equipment has been provided.

The Photographic Club has been formed among the students for the study of the subject along the line of better pictures. Some very interesting trips have been taken by this club both into the mountains and beaches near Los Angeles. The students have a chance to develop themselves along the more artistic lines of photography and these trips have proved invaluable to them.

If there are any other public schools having courses in photography we would be very glad to get in touch with them.

ROOSEVELT HIGH SCHOOL,

LOS ANGELES, CALIF.

[We hope that our readers will get in touch with the Photographic Department of the Roosevelt High School. It will be of mutual benefit. EDITOR.]

The Wollensak Auto-Memo

THIS clever little device is not photographic, although, at times, it may have an important part to play in getting the desired picture. Briefly, the Auto-Memo tells the auto-owner when he should change the oil, put fresh water in the battery and when he will need gasoline. An interesting descriptive leaflet may be obtained by writing to the Wollensak Optical Company, Rochester, N.Y.

Scientific Section Annual Exhibition of the Royal Photographic Society

THE Royal Photographic Society of Great Britain is holding its seventieth annual exhibition in September and October of this year. This is the most representative exhibition of photographic work in the world, and the section sent by American scientific men heretofore has sufficiently demonstrated the place held by this country in applied photography. It is very desirable that American scientific photography should be equally well represented in 1925; and, in order to enable this to be done with as little difficulty as possible, I have arranged to collect and forward American work intended for the Scientific Section.

This work should consist of prints which show the use of photography for scientific purposes and its application to spectroscopy, astronomy, radiography,

biology, etc. Photographs should reach me not later than Saturday, June 13. They should be mounted but not framed. There are no fees.

I should be glad if any worker who is able to send photographs will communicate with me as soon as possible so that I may arrange for the receiving and entry of the exhibit. Address A. J. Newton, Eastman Kodak Company, Rochester, N.Y.

THE PICTURE-MARKET

There is a market for every good photograph. The amateur and the professional photographer have the opportunity to sell good pictures and to derive financial benefits from their camera-work. To make this department accurate and reliable we have requested and obtained the hearty co-operation of the editors. We make no claim to publish a complete list of the markets each month; but the names of magazines that appear below we know to be reliable and in the market for photographs at the time of going to press. We have obtained our information direct from the editors themselves.

Radioscope Magazine, 685 Mullett Street, Detroit, Mich., H. N. Walker, Editor, uses write-ups and descriptive material on broadcasting stations giving any interesting data and facts pertaining to the establishment, operation and maintenance of the station. These articles should be from 400 to 800 words in length and at least three photographs should accompany the article. The photographs desired are one of the towers or exterior of the station, an interior view of the transmitting apparatus or studio, and a portrait of the announcer or feature artists of the station. We are particularly anxious to receive promptly material of this kind on west coast stations.

Human interest stories regarding the life and work of popular announcers for feature artists of broadcasting stations. Article to be in the nature of a biographical sketch, but incorporating a human interest appeal. This type of article should be preferably of 600 to 1000-word length and accompanied by photograph of the subject. We suggest that it would be best to write first before submitting pictures.

COMING EXHIBITIONS

MAY 15 TO JUNE 15, 1925. Second International Salon of the Pictorial Photographers of America to be held at the Galleries of the Art Center, 65 East 56th Street, New York City. Last day for receiving prints, April 18. Address all communications to John H. Kiem, Chairman Exhibition Committee, Art Center, 65 East 56th Street, New York City.

SEPTEMBER 14 to SATURDAY, OCTOBER 24, 1925. Seventieth Annual Exhibition of the Royal Photographic Society of Great Britain, 35 Russell Square, London W.C. 1, England. Last day for receiving prints Friday, August 14. We have entry-forms and shall be glad to mail them as long as they last, to any readers who will send two cents in stamps for postage.



THE PUBLISHER'S CORNER



Nude "Art-Studies" and Photo-Era Magazine

A FEW weeks ago I received a letter from a news-dealer in which he requested that we cut in half his order for PHOTO-ERA MAGAZINE. He expressed regret because, personally, he liked the magazine. Then, by way of a friendly suggestion, he added, "if you would publish a few nude pictures once in a while, we could sell more copies." I acknowledged his letter and well-meant tip, and informed him kindly that if it required nude pictures to sell PHOTO-ERA MAGAZINE I preferred to seek some other means of livelihood.

When I became editor and publisher, I decided to omit nudes from the text and advertising pages of this magazine. As soon as my decision became known, I was "cussed" and discussed in certain quarters. I was called extremely narrow-minded, a prude and even a positive hindrance to the growth of photographic art. Yes, I lost certain advertising patronage, sales, subscribers and the good will of some well-known pictorialists. From a financial point of view, my decision was a very poor one, indeed.

Well, let me state my case. In my formative years I was blessed with the companionship of a true art-lover—my mother. With her I made four trips to Europe, not one of which was for less than one year, and the longest three years. Under her guidance, I visited the leading museums and art-galleries of France, Italy and Germany. I saw the nude in painting, and sculpture. I was shown the best, and the worst, under a watchful and understanding mother's guidance. Through her I learned the difference between the sacredness, purity and true divinity of the human form, and its opposite. I learned to respect, admire and understand the nude as it was used by the old masters to depict all that was pure, beautiful and divine. Thanks to my mother, there was implanted in me that conception of the nude which has ever led me to consider the human form something sacred. As the years rolled on, I married a girl who in her sweetness, delicacy and purity strengthened my conception of the sacredness and beauty of the human form. Thus, through the two nearest and dearest women that a man can ever know, I received my conception of the nude and its relation to true art. Can many of the so-called photographic "art-studies" of artists' models, dancing-girls and bathing-beauties meet my conception of the nude?

Do not misunderstand me, please. I have no quarrel with those who are trying to publish, advertise or make clean photographic "art-studies" of the nude. This is a big world, with men of many minds; and they all have the right to their own opinions, even as I have the right to mine. I may be narrow-minded, a prude and a hindrance to the growth of photographic art; but until more of the nude in photography approaches that conception of the nude which I hold, I cannot justify it in the pages of PHOTO-ERA MAGAZINE. If I must lose advertising-contracts, sales and subscribers because of this decision, it will have to be. Rather would I be compelled to cease the publication of this magazine than to feel that I had thrown into the dust that ideal which was given to me by two of the best friends that a man ever had.

Perhaps I am entirely wrong, as some have informed me; but PHOTO-ERA MAGAZINE is all that I have in the world. Into it I am trying to put the best that I have to give. It is not a money-making proposition, just a living. There are no stockholders to consult or a board of directors to question. Therefore, it can have its ideals and stand or fall by them; mine alone is the blame.

Shall We have a Referendum?

UNLESS our readers who prefer a specified subject for each competition raise their voices or write more letters, PHOTO-ERA Competitions will be conducted for Miscellaneous subjects only, in the Advanced and in the Beginners' departments. There is an increasingly strong demand that specified subjects be eliminated from our competitions. In fact, so pronounced appears to be the sentiment that we may make the change before the end of this year. However, I wish to give all our readers a hearing. Suggestions as to how best to decide the matter will be welcome. Remember that the majority will rule and let there be a prompt response from both "parties". The number of entries in our competitions proves that interest in photographic competitions, of all kinds, is on the increase. The more the merrier, and the better for photography!

'Twould Do a Heap O' Good

WERE it not for possible misunderstanding on the part of readers, I would like to print a selected list of twenty-five or fifty of the good letters that have reached my desk during the past few weeks. These letters from subscribers seem to agree on one point—that there is something personal, warm and friendly about our pages. This is just what we have been trying to "put over" for the last four years. It takes time to make men and women understand some things; but when they do, then there is action; and now we're getting a splendid response. It proves that our readers are finding out that PHOTO-ERA MAGAZINE is different. It is running along quietly, with its ideals and little pet theories, and is finding many a hearty handclasp along the way. If you like the magazine and understand that it claims no great laurels other than just a sincere attempt to be clean, practical and inspirational—pass the word around, 'twould do a heap o' good and make possible greater service to all.

A Word to our Contributors

OF late, we have received some exceptionally good material which merits a place in our pages. In fact, we have received enough to take care of our requirements for several months to come. This does not mean that we would stop the welcome arrival of material—not at all. However, it is but fair to make it clear that the number of our text-pages has to be limited and that several months may elapse before certain articles and pictures appear. We are endeavoring to use all material in the order that it is received. We admit making special exceptions, now and again; but not as a regular thing.

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